50 YEARS

# of LIS Education in North East India

Chief Editor: Sanjay Kumar Singh

Editors: Tilak Hazarika, Dipen Deka, Badan Barman

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Sanjay Kumar Singh
Tilak Hazarika
Dipen Deka
Badan Barman

Department of Library and Information Science
Gauhati University

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Department of Library and Information Science
Gauhati University, Guwahati- 781014, Assam
2019

50 years of LIS Education in North East India is a **c**ollection of research papers published on the occasion of Concluding Session of the Golden Jubilee Celebration (1966 – 2016) of the Department of Library and Information Science, Gauhati University, Guwahati, Assam on 9th February 2019. Edited by - Chief Editor: Prof Sanjay Kumar Singh; Editors: Dr Tilak Hazarika, Dr Dipen Deka and Dr Badan Barman.

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Preface

The developments of latest tools and techniques in libraries have made a great impact on library management and services in this changing world. It has brought the revolution, the way libraries and LIS professionals are rendering services to their clientele. Today libraries have more than enough options to choose from different sources, which are readily available to cater to the needs of their users and to facilitate better services. Libraries are evolving as an important factor in academic research. Today we live in a rapidly transforming world inevitably driven by the growing volume of knowledge. Changes are noticeable in universe of knowledge in general and growth of specific subjects in particular. Library and Information Science is not untouched one. Before the establishment of the Department of Library and Information Science at Gauhati University in 1966, the people from Assam and other part of North Eastern Region were going to Benaras, Calcutta, Delhi, etc. for doing Certificate, Diploma, BLibSc, MLibSc, etc. Since 1966 the brain drain from Assam got full stop as Gauhati University started BLibSc as evening course of one year duration under the leadership of Dr (Late) Jogeswar Sarma, the founder Librarian of Gauhati University Library (now K K Handiqui Library) as Head (i/c) of the Department of Library Science, Gauhati University. In Assam at present Department of Library and Information Science, Gauhati University (1966); Centre of Library and Information Science, Dibrugarh University (2005); Department of Library and Information Science, Assam University, Silchar (2009); Department of Library and Information Science, Jorhat (2015); and the Study Centres of IGNOU (Guwahati, Dergaon, Golaghat, Jorhat, Dibrugarh, Lakhimpur, etc.), K K Handiqui State Open University (Guwahati), Global University, NIOS, Vinayak Mission University, Mahatma Gandhi University, etc are imparting LIS education in full

swing *viz* certificate, Diploma, BLISc, MLISc, MPhil, PhD in distance mode. Radha Madhab College (R M College, Silchar, Assam has also conducted a number of certificate courses in Library and Information Science, which are found to be very useful for the lower category posts.

All the LIS schools are following independent course curricula with diverse degrees without keeping balance between theory and practice. If the uniform LIS education will not be given due importance in coming days, it will be very difficult to produce quality librarians. In that case we cannot think of having a good/ quality library and good librarian. It is high time that LIS education should be given importance at national level by adopting uniform syllabus and curriculum along with same duration of course throughout the country with same nomenclature, and then only we can say that we are imparting LIS education in right perspective in the era of Credit and Grading System, i.e. CBCS. If same course, same syllabus and same duration for a particular course will be implemented by all LIS schools of the country, then only one's credit can be transferred from one school to another school and more over one can think of introducing Value Added Courses and open courses for an individual student. At present a few LIS schools are providing value added courses and open courses, which is of no use when Choice Based Credit and Grading Systems (CBCS) are taken into account.

The LIS professionals, equipped with new knowledge can be instrumental in harnessing the combined intellect of teachers and learners as creator of knowledge through various platforms. Libraries have to measure users' perceptions and expectations since it form the basis for quality library service. By regular assessment of performance, a library can ensure maximum utilization of its resources towards meeting the needs of the users. Various issues like academic, management, technological, legal perspectives, balancing of theory and practice, research, urgent need of National Accreditation Agency for LIS, and globalization of education, etc. are the need of hours in changing environment. It may be mentioned that both learners/ students as well as teachers must be conversant with the changing trends due to explosion of literature, technology and other similar activities. For that we have to highlight on whether we are prepared

to accept the new challenges or not; whether the present course curriculum are relevant and compatible with the social change or not; whether it will serve the interest of common people or not. There are several questions coming to our mind regarding LIS education in Assam in general and India in particular.

We have received unprecedented responses to our request for papers. We have received 51 Papers, and after process of referring 28 full papers and one report have been selected for publication in this book. The papers published in this book covers entire area of topics under the theme on LIS education in North East India, LIS research in North East India, Career/Job opportunities for LIS students, Library Associations and the LIS education in India, Future of LIS curricula in Indian Universities in Global Perspectives, LIS Education for supporting social development, LIS Education for heritage preservation, Prospects of LIS Education, LIS Education in new generation, LIS and Universe of Knowledge, History of LIS Education, LIS Education through distance mode, LIS Schools in India, Libraries are gate way to Knowledge Society, etc. We would like to acknowledge all the author(s), co-author(s) for their contributions and sharing knowledge and experience. It is expected that this book will be very much useful for the students, research scholars, teachers and information managers who are engaged in various Library and Information Centres.

Editors

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List of Contributors

Name	Designation and Address
Ahmed, Latifur Alom	Research Scholar, DLIS, Assam University. Email-latifuralom@gmail.com
Bagchi, Mayukh	Documentation Research and Training Centre (DRTC) Indian Statistical Institute, Bangalore, India E-mail: mayukhbagchi@drtc.isibang.ac.in
Barman, Badan	Assistant Professor Department of Library and Information Science Gauhati University, Assam Email: badanbarman@gmail.com
Barman, Rajani Kanta	Former Professor and Head, DLIS, Gauhati University. Email-r.k.barman.gu@gmail.com
Bharadwaj, Manashi	Asstt Librarian, Patidarrang College, Muktapur, Kamrup
Bhattacharya, Narendra	Librarian, MCKV Institute of Engineering, Liluah, Howrah. E-mail- arendrabhattacharya415@yahoo.com
Buragohain, Alaka	Fromer Profesor and Head, Department of Library and Information Science Gauhati University, Assam
Chakraborty, Rosy	Former Senior Librarian, PEEPL, e-mail- rosynabinsarma@gmail.com
Chandel, A S	Sikkim University, Gangtok, Sikkim
Das, Dhrubajit	Librarian, S.B.Deorah College, Ulubari, Guwahati - 781 007. Email:das.dhrubajit@gmail.com
Das, Subarna Kumar	Professor, Dept. of Library and Information Science Jadavpur University , Kolkata - 700 032 E-mail : skd_ju2002@ yahoo.co.in
Deka, Dipen	Assistant Professor Department of Library and Information Science Gauhati University. Email Id: dipendeka@gauhati.ac.in

Ganaie, Shabir Ahmed	H.O.D, DLIS, University of Kashmir
Goswami, Kukila	Former Research Scholar, DLIS, GU Email-kukigoswami@gmail.com
Hazarika, Tilak	Assistant Professor Department of Library and Information Science, Gauhati University. E-mail: tilakdlis@gauhati.ac.in
Jabeen, Sumaira	Research Scholar, DLIS, University of Kashmir Email: sumairababa2524@gmail.com
Khongtim , Jiarlimon	Department of Library and Information Science North-Eastern Hill University, Shillong Meghalaya, India E-mail: jiarlikhongtim@yahoo.co.in
Khullar, Leena	Assistant Librarian A.C Joshi Library, Panjab University, Chandigarh -160014 E-mail leena_kohli@yahoo.co.in
Lahkar, Narendra	Professor & former Head, & former Dean (Arts) Department of Library and Information Science, Gauhati University, Guwahati- 781014 (Assam). e-mail: nlahkar@gmail.com
Mazumdar, Nirmal Ranjan	Librarian, Pub Kamrup College, Baihata Chariaali, Kamrup
Naga, Moses M.	Department of Library and Information Science North-Eastern Hill University, Shillong, Meghalaya, India
Narzary, Maya Moyee	Librarian, Gossaigaon College, Gossaigaon, Email: mayamoyee@gmail.com, Mob: 9954873733
Ngurtinkhuma, R. K.	Department of Library & Information Science Mizoram University, Aizawl E-mail: rkngur15@gmail.com
Pal, Shyamshree	Former student, Department of Library and Information Science Assam University, Silchar - 788011 Email: drmsarmah@gmail.com
Pandita, Ramesh	Assistant Librarian, BGSB University, Rajouri, Jammu & Kashmir, Jammu - 180013. E-mail: rameshpandita90@gmail.com

Pathak, Alok Kumar	Assistant Librarian K K Handiqui Library, Gauhati University
Rath, Pravakar	Senior Professor Department of Library and Information Science Mizoram University, Aizawl-796004 E-mail:mzut016@mzu.edu.in
Roy, Sangeeta	Librarian, Dispur College, Guwahati. E-mail- roysangi98@gmail.com
Sarmah, Mukut	Associate Professor Department of Library and Information Science Assam University, Silchar - 788011 drmsarmah@gmail.com
Sharma, Narendra Nath	Fromer Profesor and Head, Department of Library and Information Science Gauhati University, Assam
Sharma, Nilakshi	Library Assistant (Contrctual) Mangaldai College. Email:Snilakshi4@gmail.com
Singh, Ch.Ibohal	Assistant Professor (S-3) Department of Library and Information Science Manipur University, Canchipur, Imphal-795003 E-mail: ibohal68@gmail.com
Singh, Sanjay Kumar	Professor & Head, Department of Library and Information Science, Gauhati University, Guwahati- 781014 (Assam). e-mail: sksgu1@gmail.com sksgu1@gauhati.ac.in
Singh, Shivendra	Senior Librarian, All Indian Institute of Medical Sciences, Patna- Ph. -+91-1639-250433, E-mail: shiv.mail@gmail.com
Sinha, Manoj Kumar	Dean, Swami Vivekananda School of Library Sciences &HoD, DLIS, Assam University, Silchar, Assam, India E-mail:mksinha1965@gmail.com dr_mk_sinha@yahoo.com
Varghese U, Jolly	Librarian , St.Mary's College, Thrissur, Kerala

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Reminiscence of my association with the Department of Library and Information Science in Gauhati University

Alaka Buragohain

To-day on the occasion of Golden Jubilee of the Department of Library & Information Science, I recollect how did I come to the profession of Librarianship, fought against all the odds and enjoy all the endeavours with both colleagues and students. It was during later part of 1959 when I came to Shillong for a climate change of sickness of my health caused due to expiry of my beloved father and stayed with my cousin brother late K K Phukan, I A S. I was invited by late Principal Usha Bhattacharjya of Lady Kean Girls' College, Shillong in the first part of 1960 to take charge of the College Library in the scale of Rs 100/- only per month; and she made me meet the then librarian of St. Edmunds College for proper motivation. I developed an interest in the service in association with the young students there and was often encouraged by one Prof Panigrahi, Vice Principal of the college with intimation of the importance and prospect of this professional service. I realised that unless this profession is improved the entire education system would suffer. I feel I had some inclination towards public service; I served as the General Secretaries of the Students' Unions in both T C Girls' High School and Handique Girls' College at Guwahati.

In the meantime, I was invited by Darrang College, Tezpur to join as a Tutor in English with an assurance to provide all facilities to appear in the M A Final examination in English for improvement of my degree.There was dearth of people to teach English that time in Assam. The Principal of

that college was eminent socialist leader late Bipinpal Das, later was an M P and a Deputy Minister in Central Govt. His wife late Arati Das was my teacherin T C Girls' High School in Guwahati; she wrote to me that seven hundred students were waiting for me there. However, inspite of my willingness to join there, as my elders did not like the idea of my staying there alone without a hostel although with proper provision for protection with a college rented part house, I opted to join the Delhi University in Library Science. I was granted a seat in the Institute of Library Science in Delhi University, at the same time with a stipend from the Govt of Assam for one year Diploma course in Library Science, 1961-1962.

I joined the course in 1961.While studying there I was recommended by the Dept for a post in the USIS Library in Patna with prospect to visit and further study in the United States also and was advised to think over the night upon the offer. I had refused the job straightway and declared that I will be back to my own place after completion of the course to serve my people. So, I came back to Guwahati in 1962. And rejecting the invitation of the Arya Vidyapeeth College, Guwahati to join both the Library and the English Department, I joined the Gauhati University Library as a Classifier in November, 1962 with the understanding that I shall be getting the opportunity to be appointed as an Assistant Librarian within a few months as new posts had already been created at the initiative of Dr H G Taylor Vice Chancellor. Late Mrs Sarada Nair also had joined the University Library as the Cataloguer. Unfortunately, due to our keen interest to improve the Library Service we got the reward in the form of dropping the said post of Asst Librarian after keeping it in abeyance for a long time. So, I appeared in M A Final in English in 1966, got my degree and intended to leave the profession. And I got invitation immediately informally from the Dept of English, Lady Keane Girls' College, Shillong.

On the other hand, based on a resolution of Academic Council dt 26.11.1963 recommending opening of Diploma Course in Library Science, the Executive Council of G U dt. 4.7.66 had decided to open the Bachelor degree classes in Library Science w.e.f. 1966-67 session. The move of the Academic Council was strengthened by a strong resolution for opening the course adopted in the 8th Conference of Assam Library Association, held in 1964 under the able president ship of Prof (Dr) Maheswar Neog, a reputed scholar of Gauhati University. He had invited and made Dr S R Ranganathan, father of Library Science and Library movement in India

attend the conference along with a few other reputed professionals including Prof P N Kaula, professor of Benaras Hindu University. In the mean time, Late Dr Jogeswar Sharma, Librarian of the Gauhati University had been sent to Delhi University on deputation to study Master's course in Library Science, 1965-66. It was the result of keen interest of former Vice Chancellor Dr H G Taylor to improve the university library service. Dr Sharma had completed the course and had come back in 1966. So, the Department of Library Science had been started in 1966 as an evening course in charge of Librarian Dr Jogeswar Sharma pending appointment of a whole time Reader in Library Science.

Under such situation, one afternoon Late Prof Deba Prasad Barua, then Dean of the Faculty of Arts, later Vice Chancellor of the University came to my section in the Library and asked me to decide over the night if I shall go back to my subject or remain in the profession. Next morning, I had decided finally to remain in the profession because there was dearth of people in the profession that was in need of much improvement. I joined the Department at first as a part-time teacher in October, 1966 while late Sarada Nair, Cataloguer of the Library joined little earlier. I joined the Department of Library Science on December 19, 1966based on the recommendation of a Selection Committee approved by the Executive Council dt.10.12.66 as the first full-time lecturer with only a Diploma in the subject along with a Master's degree in English Literature as per provision of the University Grants Commission. That time it was considered as the subject was a newly developing one. Some of my colleagues in other subjects that time in the University had even the Ph D degree in the respective subjects. On the other hand, Sri Ram Tirtha, M.Sc (Class III), M. Lib. Sc. (class II) who was recommended earlier for appointment as a full-time lecturer by the Selection Committee dt.14.10.66 had informed his inability to join the Department. So, against this post LateDr R L Mittal who was in 2nd position in the selection along with myself was appointed as the second full-time lecturer of the department during September, 1967.Late Bhadra Borah joined the Department in 1969. He passed the B.Lib Sc from the Dept. of Library Science, Gauhati University in 1968 belonging to the second batch from the department.

During the entire period of evening course session, excepting the Meeting held in March, 1969 along with a Playcard Exhibition on the Role Books and Library Profession at the occasion of Distribution of Books by

the Sarada Ranganathan Endowment, Bangolore, no other academic and professional activities took place. However, in 1967, acting as a resource person in the Workshop on School Librarianship, organised by the Dept of Education, G U and sponsored by N C E R T (National Centre for Educational Research &Training, New Delhi), we could refresh ourselves by exchanging views with the teachers and Head masters of the schools who had joined the Workshop very actively. In 1971, I joined the Maxmueller Bhavan in Pune for an intensive Preliminary German language course on study-leave. And in 1973, I was selected to participate from Gauhati University in the "First All India Workshop on Methods of Teaching and Evaluation in Library Science", organised by the Dept of Library& Information Science, University of Delhi and sponsored by the University Grants Commission held from May 15 to May 30, 1973. This workshop had encouraged me to take further study in the subject.

So, in 1975, I joined the Master's course in Library and Information Science, Delhi University on study-leave. The same year there was a proposal to start Master's course in Library Science in Gauhati University also. Post of Readership was not advertised till that time, rather the Librarian was put in-charge of the Dept of Library Science against that post. Now both the posts of Readership and Professorship were advertised. Due to urgency, I had to come home during my first semester to apply for the post of Readership. Master's degree in Library Science was not made compulsory by the U G C (1965) for Readership until the revised scale was introduced if one has got five years teaching experience in Library Science. And in spite of my written request to the authority not to hold the Interview for the post just before my Final Semester Examination, I was invited for the interview and had to loss a few very important days just before the exam. But, the entire selection episode along with several other subjects had been nullified on some legal ground.

I came back from Delhi University with Master's degree in Library and Information Science in 1976. In the mean time in 1975 while I was away on study-leave, Dr Narendra Nath Sharma had joined the Department as a full-time lecturer. Dr N Sharma had passed B. Lib. Sc. from Gauhati University in 1968 belonging to the second batch. Sri Bhadra Borah also had gone to Delhi University for a Master's course, 1977-78

It is interesting that advertisement for M.Lib.Sc., 1975-76 in G U, as an evening course had appeared to which I had reacted by a letter to

the Vice Chancellor, G U that nowhere in India Master's course was conducted as an evening course unless the duration is doubled. Library Science is a practical professional subject not suiting in an evening course. Later, Master degree course in Library Science in Gauhati University was started as an afternoon course in 1979. Sri Mohendra Borah from Agricultural University Library and Sri Paritosh Purkayastha from Assam Engineering College Library, Guwahati had joined as part-time lecturers. The course, although of one year duration consisting of two semesters could be completed and degree given only in 1983 due to Assam Agitation and other technical problems.

Advertisement for both the regular posts of professorship and readership in revised scale although was made in 1977, no one was recommended. Fresh advertisement was made in 1977 itself for both the posts this time under 5th Plan, and the first interview was held only on 22.8.79. There was recommendation for Readership, but not for Professorship; however the recommendation was not placed before the Executive Council on the ground that the constitution of the Selection Committee was irregular as the Librarian as the Head of the Department was not included in the Selection Committee. As such, it was pointed out to the decision of the Ad hoc Committee constituted by the Executive Council submitting its report on 20.6.77 itself that "since there was no evidence to show that the Librarian was ever appointed either as a professor or a reader, his status was no more than a Part-time Lecturer; that the inclusion of the librarian in the Selection Committee would make its composition illegal and ludicrous since no part-time lecturer sits as a member of the Selection Committee to select a Reader". This opinion was confirmed later by the legal clarification of the Education Department, Govt of Assam on 19.8.81 stating that "since no person other that of a Professor or Reader can be appointed as Head of the Department there cannot be any question of Librarian recognised as Head of the Department for the purpose of Selection Committee". The Librarian was put in- charge only against the post of a Reader "pending appointment of a whole-time reader in Library Science", although he was designated as the Head of the Library Science Department. It may be mentioned also that the Librarian of the Gauhati University that time was not given the U G C pay-scale and status.

This time, the E C dt. 31.12.79 while confirmed its proceedings of the meeting dt. 12.11.79, had added a new ground of rejection of the Selection

Committee Recommendation by stating that "the statements of candidates with bio-data has not been received by one of the statutory members who was out of station"; (he was expected to arrive in time), although they had taken a decision on 12.11.79 interalia that "(3) If any of the statutory members other than the nominated members (subject experts) remains absent it will not invalidate the selection."

So, fresh interview for the post of Readership (under Plan post) with the same candidates took place on 29.3.81 under a Selection Committee without co-opting the Librarian. This time also the recommendation dt. 29.3.81 was not placed in the Executive Councildt. 30.3.81 strangely in violation of the G U Act. It is presumed that due to influence of a few powerful members of the E. C., the Vice Chancellor held that after introduction of the new pay-scale, the E. C. has been generally adopting the U G C norms for appointment, although exception was made in French language (in several other subjects also). He held that Doctorate degree in Library Science or allied subject is a must for Readership in Library Science. So, recommendation was not allowed to be placed in the Executive Council meeting on pretext of declaration by the Registrar that no candidate had a Doctorate degree applying for the post of a Reader in Library Science. It may be mentioned that University Grants Commission (1981) did not insist that time on either a Doctorate degree or research publications for Readership in Library Science but a Master's degree in the subject with teaching experience as it was a newly developing subject. Even in other subjects also, equivalent research work may be considered instead of a Doctorate degree. It was unfortunate that the same V C used to recommend all the time as a member of the Selection Committee. The post lapsed on 1.4.81. U G C extended the period for another six months for filling up the unfulfilled posts, but unfortunately the recommendation dated 29.3.81 meeting was kept in abeyance. The Plan post lapsed on 1.10.81 finally.

To my utter surprise, along with the Plan post, the regular post of Readership duly budgeted also was abolished from the budget very strangely enough, passed by the Finance Committee, by the Executive Council and by the Court. But the regular post had to be revived later on 26.3.83 by the Executive Council and decision was taken to advertise the post as a result of my Protest with a Petition to the Governor of Assam who was the Chancellor of the University, copies of which distributing among some of the Executive Council members also. It was learnt later that the Chancellor

and many of the members of the Executive Council had been much annoyed at such motivated, discriminatory, unjustified action of the University towards a member of the fair sex.

Fresh advertisement was made for the regular post of a Reader in Library Science and I approached the Gauhati High Court that directed me on 27.7.83 to appear in the interview to be held on 28.7.83 without prejudice to my earlier claims. This time also the Selection Committee had recommended my name for appointment. As per verbal direction of the Registrar, G U, I had taken charge of the Dept of Library Science on 1.9.83 as a lecturer in-charge from the G U Librarian who had retired on that date.

At last, appointment letter was issued and I joined as a Reader of the Dept of Library Science on 1.11.83 and became the Head of the Department as per University rule waiting for more than three months for the appointment letter and after the post of Readership remaining vacant for long seventeen years. Now, the barren field of library science education remained to be organised. My students were my strength. The Dept of Library Science was separated from the University Library. The first thing I had to do was to request the Deputy Registrar who was in-charge of the Library to lend me the Library Almirah temporarily in order to accommodate the office files of the Department; then to the Secretary, University Classes to provide us an office room and the necessary furniture. Two ad hoc lecturers were appointed, Smti Meera Barua and Sri Narendra Lahkar. In order to equip myself with the latest trend in librarianship, I had attended the Goden Jubilee celebration of Indian Library Association in Bangalore, held in December, 1983. The evening classes of Library Science, G U had been shifted, at first to the afternoon sessions, then to day sessions w.e.f. January, 1985 along with a extensive revision of both the bachelor's and Master's courses. And corresponding to the revision of the courses, the nomenclatures also have been changed from Library Science to Library and Information Science and from B. Lib. Sc. and M. Lib. Sc. to B. L. I Sc. and M. L. I. Sc.

I did not bother for getting a Doctorate degree and producing a Doctorate degree holder fulfilling the demands in general for a professorship although in case of library science these norms were not adhered to that time. Library science is a professional subject and in a developing stage in India. Nevertheless, I got a free hand to decide what is most needed for

the profession. Unless the professionals achieve a status, financially and socially, no bright student would come to join the profession resulting in no development of the service. Revision of the syllabus would have been meaningless. As such, I had offered the Department as an academic platform in association with the ACLA (All Assam College Librarians' Association) for the purpose to fight for U G C pay-scale and status to the academic librarians, holding national lectures, seminars, workshops, refresher courses, deputations, press meet, etc. And we were successful in 1987. Unfortunately, we could not contribute in the field of Public librarianship, and the Assam Library Association was in defunct that time since 1972.

Sri Narendra Lahkar was appointed as a regular lecturer in January, 1986 and Sri R K Barman in April, 1986. In the meantime, demand for automation of library functions and services and use of information technology for management of information storage, retrieval and dissemination was felt strongly in India. I felt the need in our libraries badly while I visited United Kingdom for three months during first part of 1989 under the University Grants Commission's Cultural Exchange Programme in Social Science and Humanities. I came back from U. K. and in 1990, I joined the INSDOC (now called NISCAIR), New Delhi on study-leave for an intensive course for a month on Computer Application and Library Software. Coming back to Gauhati University, I did some practice while taking few practical classes on request from IGNOU, Guwahati directed by IGNOU, New Delhi. By the time, I had submitted a proposal to North-Eastern Council, Shillong on a major project for Creation of a Computer-readable Database on the North-East India, comprised of both macro and micro literature. Sri Narendra Lahkar had been sent to a U K university on British Council's stipend to learn the modern technology.

In August, 1992, I had presented a paper on "Information Technology in Need-based LIS Curriculum in India " in the Indo-U.S. International Conference, held in the Dept of Library Science, Delhi University and held that the fifty percent importance on Classification and Cataloguing should be lessened making room for new topics and subjects. There were strong opposition from some members from India, Pakistan and Bangladesh to whom I replied very aptly and strongly. However, members from U S and U K had supported my stand. Resolution was taken that Computer Application in Library Services be included in Library Science courses. One American lady had embraced me as I had spoken well on the topic.

I took charge of the Dept as the Head for the second time in 1992and received the U G C letter in 1993 that an alternative paper on Application of Computer in Library Service may be offered in Master's course. In the mean time North Eastern Council had approved my project granting Rs. 4,95,000.00, and a computer was purchased. Experiments on the UNESCO's CDS/ISIS software were made along with first a professional from NEHU library and then Prof M M Kashyap from LIS, Delhi University. Experiments took hours together as the speed and power both were less in the early computers.

Thus, the Dept of Library & Information Science, G U could be in a position to submit the proposal to introduce the alternative paper on Computer Application that was approved in the Academic Council meeting and permitted to introduce it in the second semester itself in the mid- session, 1993-94. A list of Guest professors from different departments including Computer Science, Electronics, Statistics, Commerce, etc was approved to teach on inter-disciplinary topics. And we organised three times week-long ILA-NISSAT Training programme on Computer Application in Library & Information Service, first in January, 1994; second during July, 1994 and the third one in April, 1995; all under the expertise of Sri S N Sur, ex-scientist of INSDOC under whom I learnt first in New Delhi. So, teachers, students and members of the project and other professionals had the chance to learn computer application and the library software. Prof Parthasarathi from DRTC, Bangalore, a renowned scholar also had come for such a training at a later date. We had completed the Project on N E Database in time accommodating references on books and articles till 1996 based on CDS/ISIS software. Its retrieval facility is still unique. It was MS DOS compatible, now made Windows compatible as MINISIS. The database is to be updated and a request has come from a reputed Institution.

Towards the end of my stay in the Department, I got time to start my personal research study on public librarianship and worked on the topic "A Study of the Socio-Cultural Aspects of Library Support for Non-Formal Learning in Assam". I did took as my guide learned professor in Folk-Lore late Prof Prafulla Dutta Goswami, although I was carrying my personal research myself along with guiding research study of Prof Narendra Lahkar in Library Science. Prof Goswami had passed away in the midst. I was permitted to submit my thesis independently on consideration of my experience and other works. I got my Ph. D. degree only in 1996, examined

by three different experts from three different corners of India. Viva voce was taken by two experts inclusive of one examiner. All of them had been much satisfied. Basic contention of the thesis was appreciated nationally in a National Seminar, held in Calcutta in 1999, organised by Raja Rammohun Roy Library Foundation, Ministry of Culture, Govt of India. I am still to publish my thesis after updation.

I got professorship on personal promotion only a few days earlier to my retirement on 30.11.97 from the University. I did neither try nor hanker for it; GUTA Secretary had to request the authority to hold the interview. I got extension for three years more and finally retired on December 30, 2000. I served the department as a guest professor also till 2009. By the time Prof Narendra Lahkar got his Ph. D degree. Twelve other students have been awarded Ph.D. under my guidance. As a regular resource person in the Orientation courses for college teachers and also in Refresher courses in some subjects, I tried my best to make the participants understand how students and teachers could utilise best the library and its services.

My satisfaction is that I could complete along with my assistants compilation of the National Bibliography on Indian Literature, 2nd Series (1954-2000) Vol 1: Assamese, published by Sahitya Akademi in 1914 under the Sahitya Akademy project. It is consisting of 4,540 books written by 1942 writers.

Lastly, the sub Committee constituted by the Govt of Assam in 2002 for drafting the Library Bill for Assam under the then Head of the Department Dr Narendra Lahkar had adopted the draft I made as a member of the said Committee based on my thesis suiting the existing situation in Assam with necessary additions and modifications. But it is still to be placed in the Assembly. Existing rural libraries may be treated as "knowledge centres" as envisaged in the Chief Minister's Samagra Gramya Unnayan Yojana(CMSGUY), providing regular grant based on legislative clause along with managerial direction.

In the mean time under the Headship of Prof Narendra Lahkar, the one-year B. L. I. Sc.and M. L. I. Sc. Courses in Gauhati University have been merged together for an integrated two-year Master's course. I feel, after completion of one year course, Bachelor's degree may be awarded who may be employed in school libraries and in some subordinate posts in other libraries with provision for entering into the 3rd semester at a

later date. Prof Sanjay Kumar Singh, present head who did research under my supervision may consider this matter.

Sometimes, I feel that the professionals in library and information science in general excepting the few, have lost interest in the content of the profession and are occupied mostly with the systems. Knowledge of the Universe of Knowledge, history of the books and the classic books themselves in general subjects, their impact on individuals and the society appear to be not important for them, although centring round which only the entire service is rolling through. Voltaire, the famous French philosopher rightly holds that the books are ruling the entire world excepting the barbarians.

2

Changing scenario in LIS education

A S Chandel

Introduction

It is a special occasion of celebrating golden jubilee of the Department of LIS, Gauhati University which is the oldest Department to start LIS education in North East India. It is also one of the 18 Departments of LIS in the country opened till 2017. Today, the number of Departments in the country would be about 200 imparting LIS education at different levels with different modes. Most of the universities now have the Department of LIS. This is befitting time to discuss vital issues relating to LIS education which has been continuously and constantly undergoing rapid changes. The topic is thoughtfully conceived to bring out a publication on the subject enabling professionals to do some introspection of the present scenario and suggest some changes in the present curriculum wherever needed. No doubt that there had been regular recommendations from UGC and other bodies from time to time to update and revise curriculum as needed. Quite a good number of publications have come out on this subject in addition to discussions in seminars and conferences. LIS education started with training, certificate and diploma courses and reached present stage of PhDs. Despite this, professionals coming out of schools/ departments of LIS are not so competent and skilled as required to manage modern libraries in spite of best efforts being put by the teaching departments.

The very pertinent question before the profession is whether the Departments of LIS are able to produce required manpower to manage

modern libraries where core of librarianship is losing ground and are not as essential as the periphery subjects. The subjects which used to be in periphery earlier are becoming core of the discipline. It may not be wrong to say that LIS subject has been invaded by many other subjects and discipline to the extent that its basic structure is at stake, though essential to retain. Let us know the scenario of libraries during 1960s till beginning of 1970 and the corresponding curricula during the period. There was hardly any mismatch between the teaching and practice. Teaching Departments of LIS were meeting the requirements of libraries which mostly were engaged in acquisition, processing, arranging, display and location. Classification and cataloguing used to be basic tools. Documentation and indexing were subsequent developments. Interesting would be to cite here my conversation during 1994 with one of the senior most diplomats of India who had been ambassadors to several countries, asked me a question during our conversation as what librarians do in the libraries except arranging and searching of books. He was also an author of several books. This was the perception of highly qualified diplomat and an author about libraries. It was difficult for me to give him a precise convincing answer. Corollary to this also would have been that what is there to teach in LIS up-to PhD level, where some elementary training in classification and cataloguing would have been enough. Nevertheless, present scenario is different and more transparent today. Since information became an important commodity, the image of libraries also improved. There were not many challenges of LIS education till 1970s, though computer applications had started making its impact, forming the part of curriculum. The recommendations of Ranganathan Committee Report (1965) constituted by UGC was enough to make the changes and improve existing status of LIS education. The latest recommendations were given in UGC Model Curriculum (2001) to maintain uniformity all over the country which further needs revision. It is an admitted fact that libraries are not getting adequately skillful professionals for their modern libraries. Evidence to this is that many posts are not being fulfilled. Those who are already in jobs have to seek external technical know-how to run their libraries. Therefore, we have to accept that it has become difficult to LIS Departments to produce required manpower despite their best efforts and initiatives.

Transitional Nature of Subject

LIS education scenario onward 1970s has been ever changing not only in India but worldwide caused by various factors taking place in the society. These changes have been so frequent that there was hardly time to the subject to establish and stabilize on firm grounds. Similarly, nature of the libraries, their functions and services, usage pattern of users, information resources their organizational and dissemination tools, etc. changed due to external influences. All these changes have direct implications on LIS education calling required frequent changes in the curriculum. The main reasons for such changing dimension have been as under:

Impact of Communication Technology

Most dominating influence on libraries and LIS education had been advent of information technology which came as blessing as well as challenge to information professionals which at one end simplified information control beyond expectations, on the other side many professional challenges came on the way. Who could think of bibliographical control of knowledge during 1960s, which used to be once an impossibility which technology made possible and easier. Computer applications entered the field and some LIS departments started incorporating computer components in their curriculum. There were hardly computer labs available to the teachers and students. Punch card system, hardware components and configuration, etc. used to be the main parts of study in some of the forward looking departments like Delhi University and a few others during 1970s. DRTC and INSDOC which started LIS education in 1962 and 1964 respectively conceived a different curriculum to develop and produce differently skilled manpower especially suitable for special libraries. Their approach to LIS education was to keep more abreast with the changes in view of present and future requirement of the special libraries. Services of the special libraries have been much improved than other types of libraries right from the beginning. Indexing and abstracting services were also initiated by these libraries. Manual indexing followed by computer based indexing systems entered into the curriculum along with classification and cataloguing systems.

During 1980s information sources started coming in the form of microfilm, diskettes, CDs and other formats of multimedia. All large databases which used to come in printed formats stared coming in CDs based upon CD-ROM technology. It made a great mark in libraries. At the

same time, library software started appearing on the scene. Consequently, LIS Departments had to incorporate such new advances. UNESCO Library software package, CDS/ISIS and its subsequent versions became part of syllabus in most of the universities. Now there are many library and digitization software available applicable in libraries. Though most of them are user-friendly, still needs expertise to explore their all features. Most of the students coming out with Master Degrees in LIS hardly have competence to do even the installation of these software. During the beginning of 21st century, electronic resources started multiplying. The shift started from print media to electronic media and electronic and digital libraries came into being. Management of e-resources being different than printed material, required new knowledge and technical know-how. Again other software were developed to find solutions to handle these new resources in different formats. Thus, every year there has been changes and convergence of new concept and technology. As such it becomes difficult to cope with such rapid and continued changes for teaching and practicing professionals. What to include and exclude in the curriculum is too complex a problem for teaching departments. As soon as departments revise and update their syllabus and get it approved through different academic bodies, some new concepts and newly emerged adoptable technology is knocking at the door.

Today, convergence of IT in LIS is to the extent that it is difficult to identify and isolate that have no applications in information organization and management. All manual operations have been taken over by tools and techniques of IT. Now question is what type and kinds of IT components are to be incorporated in the curriculum in addition to some already referred above in the preceding paragraphs. These are to be studied, identified and incorporated in LIS curriculum having present and future applicability in libraries. The obvious limitation is that there is a limited time, lack of expertise in IT and correspondingly the curriculum is ever increasing in its scope and coverage.

Now let us compare the competency of IT professionals and present library professionals being presently produced. Who have the better capabilities and skills to manage modern libraries between the two? Technology not only brought changes in information and knowledge management but was responsible for transformation in certain areas.

Call of the Knowledge Society and Digital Era

Let us think as to what is expected of LIS professionals living in the knowledge society. Emphasis in knowledge society is mainly on creation

and sharing of knowledge at global level. Scope of libraries no more remained confined to their respective institutions. Knowledge is to be shared by establishing network at various levels. It became mandatory for libraries to have such manpower in libraries those have the competency to create digital contents which not only requires technical skill but also knowledge of various subjects. Ranganathan was in the opinion that librarians should have basic knowledge of various subjects, therefore had introduced '*Universe of Knowledge'* as a subject of study at MLibSc level. Does it have some relevance in the present era? Libraries today need such professionals who are skillful and competent to cope up with the challenges of present digital era. The prime concern is to identify the competencies and skills required not only to create digital contents but promote their usage by imparting information and digital literacy programmes to the potential users not only at local and national level but at global level.

Web-enabled Services

Internet technology brought transformation in the society as well as in libraries. Information accessing and sharing became much easier. All resources and services are to be well organized, managed, advertised and hosted on Internet for wider accessibility and use any time anywhere. Today, what is not web-enabled is not done. Knowledge of web-designing has become one of primary components of present curriculum and requirement of every library. Web technology has been evolving over the years with different features and characteristics termed as web-1 to web-3. It is likely to become more intelligent and understanding in near future. There would be always convergence of new technologies from time to time in near future and profession should be ready to adopt them.

Multiplication of Services

All the advances discussed above led to the multiplication of services. Availability, accessibility and bibliographical control of information became much easier. Mode of generation and dissemination of services also increased along with the increased expectation of users. User behavior over the years have been changing with the changing of time. Their study also became more important to evolve need-based services. The challenges have been at all fronts of the profession. Profession does not require only technical skills but managerial competence is equally required. *Seeking Solutions*

The problems are of course confronting ones, convergence of other subjects and technology has been significant. The subjects which used to be in periphery are become core of study. The basics of the subjects of librarianship cannot be deemphasized. Removing pillars on which profession is standing cannot be disturbed or weakened. The changing structure has to be built and strengthened only on these pillars. However, there is time constrains, lack of manpower and other confronting problems and continued dilemma as what to include and exclude from the curriculum. Profession can think of integrated courses similar to law to produce competent professionals by studying various subjects during the period of 4-5 years. Faculty with expertise in computer and IT need to be essentially inducted or departments of computer applications and LIS should be merged in universities to share expertise of computers and IT of other departments.

Gap between Consumers and Producers

Since the time teaching and practice were separated and LIS departments became independent, coordination between the two became lessor and lessor. Practical training of the students during the course of study remains inadequate. The students remain confined to theory part of the study whereas, practice is more important than the theory. Theories need to be implemented and practiced. The concept of medical education where theory and practice go together should have been more effective and productive.

Course curriculum should be designed and updated in view of the manpower requirement in libraries. What skills and competencies are required need to be identified. Ask the experienced librarians who know the type of manpower they require in modern libraries. They may decide about the abilities, knowledge, skills and other requirements what they expect from the teaching departments and the students. The gap between teaching and practice must be bridged. There must be complete match between producers (departments) and consumers (libraries). As a practicing professional, essentially one may need and expect manpower having following competencies and skills in today's libraries:

i) Specialization in library software
ii) Knowledge of networking
iii) Competency in digitization and content analysis
iv) Administrative and managerial ability of senior professionals

v) Web designing and its frequent updating
vi) Competency of e-resource management
vii) Data capturing from other sources (copy cataloguing, data import and export from different platforms, etc.)
viii) Generating various services (Repackaging and creating).
ix) Basic knowledge of classification and cataloguing.
Cataloguing only descriptive part.
x) Subject knowledge of other subjects, etc.

This is age of specialization, one individual cannot be specialized in all the subjects. If different specialization is taken by different departments, the result may be better. For example in NE Region, specialization of certain subjects could be divided among the departments by mutual understanding.

Both teaching and practicing professionals should sit together and discuss such issues to arrive at some conclusions and develop need based curriculum.

It is also an admitted fact that real professional knowledge is acquired during service period and the educational qualifications and learning in the universities simply forms the background. Therefore, in-service training and education is essential to up-date knowledge and learn new developments. Departments may think of introducing such courses for in-service professionals also.

It is also well realized that it is not possible to bring frequent changes in the curriculum. Nevertheless, faculty should have the autonomy to teach new developments coming on the way irrespective of being in the syllabus or not. Such autonomy is authorized by UGC also.

These are my stray thoughts on the subject, may generate some better thinking leading to overall professional development by producing competent and skilled professionals.

3

Ranganathan and Assam : His glorious venture remained unfulfilled

Narendra Nath Sharma

S.R. Ranganathan is a classic name in the field of Librarianship in the world. A mathematician turned librarian with mere a diploma of librarianship from London University has not only turned him a giant, which gave him the name and fame of the world and also proved him a magnificent scholar provided spiritual interpretation in the field. Ranganathan was not only a scholar and but also an original path finder. Whenever he gave touches in any aspects and branches of library science, it gave an amazing and dazzling colour.

Ranganathan got the master degree in mathematics from the Madras University after struggling hard; he got a berth in the faculty where he was shining like anything. It was a social and academic obligation and was the inspiration of his mentor, Prof B Ross of the Department of Mathematics of the Madras University. At first, he was not very much keen to be the librarian of the university, when the post was advertised, he very reluctantly submitted the application on the pressures of his colleagues. But, surprisingly Ranganathan was selected for the same.

After joining as librarian of the Madras University he left no stone unturned for converting the library from a 'book godown' (till then it was thought so) to a proper functional enterprise for the students and teacher. Library education facilities in India and the scientific management which lacked in India had attracted Ranganathan in a vigorous way but these operations were not available in India. The government of Madras sent

him to London for training in Librarianship. He went then to England to complete the course (only a mere diploma) he had learned many more undiscovered and unexplored ideas hidden in Library Science.

Coming back to India he had written a lot by incorporating many more newly emanated ideas, in the field devised by him single handed. He has written books on classification, catalogue, reference services, library administration, library organisation, documentation and what not. Every book contained new ideas hitherto not known to the society earlier. Articles numbering 1000 (approximately) and original books (numbering about 50) were penned by him, made him a pattern maker in the field and thus he was acclaimed as the great library scientist in the world.

Ranganathan had a soft corner for the state of Assam in regard to library service and library education. This was evident in the midst of a dialogue which I personally came to know when I met him in 1968 in DRTC, Bangalore.

Dr. S.R. Ranganathan had endeavoured every states of India. He would take the pain of drafting Library Bill provided a request was made by the proper library authority. Assam Library Association (ALA) had requested him for preparing the draft of Library Bill in 1964. In the 8th conference of ALA held at Guwahati, he attended the session as a special guest. He in the meeting produced the Library Bill for discussion. It was unanimously accepted in toto as was drafted by no less than a person like Ranganathan. Thus Assam got the chance to be included in the road map of India as the state had got the library bill drafted by Ranganathan single handed. In the conference, he had emphasised that library bill should be enacted immediately for Assam and thereby popularising libraries for Assamese. After prolonged discussion it was decided in the meeting to visit Shillong for meeting the Education Minister, Sri Deva Kanta Barooah and Deputy Education Minister Smt. Komal Kumari Baruah. The next day the delegation of ALA under the leadership of Dr. S.R. Ranganathan met the Education Minister as scheduled earlier. After discussion with the Minister who were convinced by Ranganathan about the urgent necessity of the enactment of the Library Bill. Both the ministers had agreed and assured that it would be done as suggested and requested by S.R. Ranganathan. But despite the assurance given by the Minister, it had failed to see the light. Different Political Parties like the Congress, Janata Dal,

AGP and the BJP came to power. But no parties took it seriously for the Bill; the dream of a versatile genius of India remained unfulfilled.

Now, it is a pleasure to state that I met Ranganathan in DRTC, Bangalore in 1968 as a student of B. Lib Sc. course along with the scholars who also acted as faculty members of DRTC. The students of the course under the supervision of Dr. R.L. Mittal met him. We were 11 students. We got the chance due to Dr. Mittal's efforts. When we were allowed to enter into the drawing room, it was really a surprise. The room was quite unassuming. After fully settled, Dr. Mittal gave a brief introduction of us, and then we one by one touched his feet. Then he asked us to put questions, which he would agree to reply. To which, we replied that we are only three months old in the course. Indirectly we dared not.

Ranganathan had analysed the glorious heritage of library education and he was optimistic that the newly recruited professionals in the profession would be able to remove the cloud engulfed by our ignorance and darkness. In the meantime, we summoned up courage to take active part in the discussion. By that time Mrs. Sarada Devi, his wife also joined the group. She had welcomed all of us by her kind look and her smile reminds that a real mother was with us. Ranganathan's eyes fall on me and asked several questions and also asked about the fate of the Library Bill drafted by him. He knew its fate. Then I narrated the entire story. From his appearance, I presumed it was a cruel disappointment to S.R. Ranganathan.

In the discussion, I replied to him point by point that I refused to be a librarian in a college since the cases of the college librarians were not taken seriously by the Education Department. A librarian with proper qualification when appointed to a college library, his scale of pay would be equal to that of a graduate teacher of a high school. A librarian after graduation was required to acquire a degree of Library Science under Gauhati University and only a limited number of students would be selected for the course. My frank reply annoyed Prof. A. Neelameghan and Ramarao, both of them were present and also faculty members of the DRTC. Since I was a college teacher, I could not think joining the library of a college. Any way our scheduled time was over. But Ranganathan prolonged it further for another 15 minutes.

My arguments probably convinced him and supported me by saying that good payments must be made in order to get good works. He opined

that he would write to the Govt. of Assam. Such disparity of the scale should go as soon as possible.

When I personally said 'namaste' and touched his feet again he told me that "You young boy, do not leave the profession, this will help you in your prosperity. May God bless you". Lastly, he wished us good bye and good luck to all of us. It was later known that he encouraged our Gauhati University to take initiative for starting the B. Lib Sc. Course and in initial years Ranganathan took the evaluation works without claiming money for that.

Indeed, it is a blessed experience to write the article on Ranganathan. He was a teacher, a good administrator for an unparallel span of more than 45 years, renowned for his administrative efficiency. Mathematics gave him a sharp mind, he was also religious and happy with this profession. Scriptures resolve to entrench activity in Dharma and his foreign tour gave him dedication for national growth through the Library movement. He worked relentlessly without holidays, remaining more than 12 hours a day in the library.

May his soul bless us.

4

LIS Education in Assam with reference to Gauhati University

Sanjay Kumar Singh

Introduction:

It was really a dream come true for the people of Assam who had agitated for decades for an institute of higher learning in the state when Gauhati University was established on 26th January 1948 by an Act of 1947. It started functioning as an affiliating, teaching and residential university from a few temporary buildings in Guwahati. Prof K K Handiqui was the first vice chancellor of the university. Dr Phanidhar Datta, Dr Sailandhar Rajkhowa and Dr Sarat Kumar Dutta were the Registrar, Treasurer and Secretary of University Classes respectively. The emblem of Gauhati University was designed by Sri T Mukherjee, a Textile designer from Ahmedabad. The Sanskrit words written on the logo *Vidyaya Sadhayeta* means 'achievement through learning' reflects the motto of Gauhati University.

Prior to its establishment the only university in the entire eastern region was at Calcutta, which catered to the needs of the students from Bengal, Bihar, Orissa and Assam including seven sisters. In 1911 Bihar and Orrisa got their own universities and after a long struggle the Gauhati University came into existence in 1948.

We are living in a transforming world inexorably motivated by the escalating amount of knowledge. There is an incredible change in the universe of knowledge in general and specific subjects in particular. Library and Information Science is also not untouched. The LIS Education is also

shifting swiftly in entire globe. In sixties Gauhati University of Assam made the first move to start LIS education in Assam. Prior to that, a person from Assam had to travel Varanasi, Calcutta, Delhi, etc. for acquiring Certificate, Diploma, Degree, and Masters' Degree in Library Science.

Gauhati University had taken a strong step for opening library science department and for this the initial works were done by Dr. Taylor, who was the vice-chancellor during those days. The librarian of Gauhati University Library Sri Jogeswar Sarma was sent Delhi University for acquiring PG degree in Library Science. After getting the degree Sri Sarma took initiative to open Library Science department at Gauhati University. From July 1966, the Department of Library Science started functioning with B.Lib.Sc as evening course under the headship (i/c) of Dr (Late) Jogeswar Sarma, then Librarian of Gauhati University Library (now K K Handiqui Library). Classes were held from 5 pm to 7 pm (sometime upto 7.30 pm also) in Room No. 4 of GU Arts Building. Today this room is again in the possession of the department. Classes were taken by Dr Sarma. After one month Late Smt. Sarda Nayar from GU library was entrusted to teach Administration paper. After few days Sri R L Mittal joined as a lecturer in this department. He was teaching Library Administration and Organisation. After few days Smt Alaka Buragohain started teaching Bibliography. In 1982, the Gauhati University Library was renamed as K K Handiqui Library after the death of its first Vice Chancellor Professor K K Handiqui an Orientalist of world fame.

The Department of Library and Information Science, Gauhati University became the first post graduate and premier department of library and information science in the entire North-East India. In the year 1979, one year Master of Library Science (M.Lib.Sc.) programme was introduced. In 1979-80 Late Paritosh Purkayastha from Assam Engineering College Guwahati and Sri Mahendra Nath Borah from Assam Agricultural University joined the department as Part Time Teacher. In the mean time Sri Bhadra Borah also joined as Lecturer in the dept. On December 1, 1983 Sri Narendra Lahkar joined the department as Part-Time Lecturer. His service was regularised from January 8, 1986 as Lecturer. In 1983 the department was separated from the Gauhati University Library and got independent status and both B.Lib.Sc. and M.Lib.Sc. Courses become one year full time day courses. The nomenclature of B.Lib.Sc and M.Lib.Sc

were changed to BLISc and MLISc. As per the UGC guideline, the programme was reorganized as Bachelor of Library and Information Science (B.L.I.Sc.) & Master of Library and Information Science (M.L.I.Sc.) programme with some changes in the syllabus in 1985. On April 2, 1986 Sri Rajani Kanta Barman joined the department as Lecturer. In 1987 the Ph.D. programme has been introduced. In 1991 Sri Bhupen Goswamee, the Dy. Librarian of K K Handiui Library joined the dept as Part time Lecturer. In 1994 one new paper on Computer Application in LIS was introduced for the first time in the history of LIS Education in Assam in MLISc 2nd semester, and fortunately I happened to be the student of that batch. From the academic session 2001-02, as per UGC guidelines two years integrated M.L.I.Sc. Course with four semesters has been introduced by merging one-year B.L.I.Sc and M.L.I.Sc courses.

In view of changing trend of the society, the courses were again revised from the 2007-08 academic session. This time the use of IT/ICT in libraries were highlighted. In the year 2013-14 new revised syllabus with Credit and Grading system was introduced. In the year 2016, the department launched M.Phil. programme. M.L.I.Sc. syllabus was again revised in 2017 with some minor changes. M.Phil. and Ph.D. syllabus was revised after merging both the syllabus in 2017 as per the UGC guideline. In 2018 the Academic Council of Gauhati University has passed a resolution that every year each department is authorised to update 20% of syllabus and subsequently it has to complete the official formalities in due course of time. It may be mentioned that the M.Lib.Sc./MLISc of one year duration consisting of two semesters is the first department in Gauhati University to introduce semester system in 1979 in comparison to other subjects, which was initiated from 2010-11 academic session. At present there are four LIS schools in Assam and one LIS school on the boarder of Assam and Meghalaya near Guwahati which is dominated by students and teachers from Assam. Besides these, there is number of study centres of ODL in and around Guwahati city, which are imparting LIS education *viz* Certificate, Diploma in Library and Information Science, BLISc, MLISc, MPhil, PhD.

Other library professionals *viz* Wakidur Rohman, Sudhin Dutta, Sanjay Kumar Singh, Dhrubajit Das, Nabajyoti Das, Mukut Sarmah, Bobby Goswamy, Anujay Kumar Saikia had extended their services as Part Time Lectures from time to time after 1993. Sri Sudhin Dutta was the full time Ad-hoc Lecturer for few years. Sanjay Kumar Singh was also full time

Ad-hoc Lecturer for seven years. At present the dept has five teachers *viz.* Professor Narendra Lahkar, Prof. Sanjay Kumar Singh, Dr. Tilak Hazarika, Dr. Dipen Deka, and Dr. Badan Barman. Prof R K Barman superannuated from university service on 31st December 2018 as Professor.

In Assam the schools which are rendering LIS education are-

1. Department of Library and Information Science, Gauhati University (1966).

2. Centre of Library and Information Science Studies (CLISS), Dibrugarh University (2005).

3. Department of Library and Information Science, Assam University, Silchar (2009).

4. Department of Library and Information Science, Assam Women's University Jorhat (2015).

5. Study Centres of IGNOU (Guwahati, Dergaon, Golaghat, Jorhat, Dibrugarh), K K Handiqui State Open University (Guwahati), Makhan Lal Chaturvedi Open University, Global University, Vinayak Mission University, and many more.

Dibrugarh University is rendering one year BLISc and One Year MLISc courses since its inception; and others are imparting Two Years (four semester courses). The effort of the Department of Library and Information Science of Gauhati University has to enrich, strengthen and retain the students to give them opportunities and platform to learn and develop skill of their own. The department is so confident that many of the students would become and grow as a strong tree of tomorrow and oxygenate the society by supporting the teaching and learning of the education system, and become an integral part of the challenging profession of librarianship in the region.

Dibrugarh University:

The Centre for Library and Information Science Studies (CLISS), Dibrugarh University was established in January 2005 with a view to impart education and practical training in Library and Information services. Since the North Eastern states are lagging far behind in respect of Library and Information services in comparison with other parts of the country, it is expected that the CLISS will be able to overcome this situation by developing the required trained manpower. Both undergraduate course and postgraduate course *viz* Bachelor in Library and Information Science (B.L.I.Sc.) and

Master of Library and Information Science (M.L.I.Sc.) of one year duration each are imparted by the university. Most of the academic libraries are staffed by one Librarian having Library Science degree and one or two attendants without library science training. Even libraries attached with the Research organizations are under-staffed and most of the academic, special, public and sub-divisional libraries are also run by untrained librarians due to dearth of trained personal. Hundreds of Secondary and Higher Secondary schools and Junior College Libraries run without Librarians. The CLISS is expected to definitely fulfil the need of the entire region. The centre has very good output till now and almost all of the outgoing students of the centre have successfully managed to get a job in different institutions, both government and private; in different parts of the country.

Aims and objectives of the CLISS:

The basic aim of the CLISS is to develop manpower by imparting both theoretical and practical knowledge in Library and Information Science. It is intended to develop skills and techniques among the students for offering effective and efficient Library and Information Services in their future professional life,

The main objectives of CLISS are:

* To have the basic understanding about the role of Library and Information Centres in modern educational and social milieu.

* To train students on the principles of methods and techniques of organizations and management of modern library and information centre.

* To acquaint students with important information sources and services in different disciplines and service sectors.

* To train students in application of information technology in information collection, processing, storage and retrieval.

Assam University Silchar:

The Department of Library Science was established in the year 2009. The Masters of Library and Information Science programme at Assam University, Silchar educates students in the principles, practices, and ethics of library and information science, imbues them with a sense of service to diverse populations, and prepares them to be lifelong learners and active leaders in a rapidly changing information and knowledge society. The department offer two years four semesters M.L.I.Sc. (Master of Library

and Information Science) course with Choice Based Credit System; IPP; MPhil and PhD programmes.

The Department of Library Science of Assam University is committed to the University's mission of teaching, learning, research and community services. As a professional department, it is a department of choice of Assam in general and Barak Valley in particular, which educates its students, in both theory and practice, to identify, acquire, organize and disseminate information. By integrating technology across the curriculum, the department is imparting the knowledge and skills of the profession in preserving and providing access to the records of our cultural heritage and the documents of scholarly research. By nurturing research, innovation, and service, the department strives to offer high-quality student-centered programmes necessary to prepare library and information professionals in the knowledge society of the 21st century.

The Department of Library Science would be recognized both nationally and internationally as a leader in producing information professionals. The department would be noted for its production of trained and professionally qualified librarians and other information professionals who are motivated by leadership and service. Those LIS Professionals will be knowledgeable and ethical in their professional practice. While recognizing the rich cultural and technological heritage of their fields, they are prepared to make themselves adoptable in changing environment.

Assam Women's University:

The Department of Library and Information Science of Assam Women's University is located at Jorhat which was established in 2015, under the School of Engineering and Technology with a view to equip the libraries with trained manpower. The department offer two years four semesters M.L.I.Sc. (Master of Library and Information Science) course with Choice Based Credit System.

Objectives of the Programme:

* To familiarize students with basic concepts of information and its communication in society

* To introduce modern management techniques to students to manage Libraries and Information Centers effectively

* To develop skills in using computer and communication technology

* To acquaint students with the activities and services of different information systems and introduce the repackaging and consolidation techniques

* To make the students learn advanced information processing techniques and develop capability in retrieving information by applying different search techniques

* To assist students in identifying and learning the major issues in the development of new technologies in the libraries

* To introduce the different methods and techniques of research

Placement

The LIS schools were established in view of the demand of the LIS professionals in the academic and corporate sector of North Eastern Region in particular and entire India in general. The National Knowledge Commission has recommended to establish 1500 universities or institutions of higher learning in India which will require trained LIS professionals to be appointed as faculty members in the Department of Library and Information Science/ University Librarian / Deputy Librarian/ Assistant Librarian/ Information Scientist/ and other Professional positions both at senior and junior level. Obviously, there will be a great demand of the trained LIS professionals in the country.

The Government of Assam has also taken an initiative to appoint librarians in the Higher Secondary Schools and Junior Colleges in phase wise. It is also planning to open libraries in government schools like that of JNVs, KVs, private schools, public schools, etc.

There are many institutions, organisations, industries, etc. in different corners of Assam where special libraries can be started by the individuals. If those organizations will give emphasis to this, then their importance will be more in the society. As per government norms, any organization, industries, business houses are earning and making profits in a state, then under social outreach programme it has to spend a minimum of one to five percent of their total income for the welfare and development of the society. So, in this regard that amount can be utilized for libraries in the respective states.

Even the UGC is giving importance for social outreach programme in the universities and colleges. Under CIS programme the colleges are directed to provide the library services to the local people living in and around the college. Accordingly some of the colleges in the state of Assam have started rendering this service to the local people of that region. So, for the smooth functioning of the libraries and to fulfil the above mentioned services, the individual library needs more manpower.

Uniform Syllabus:

At present all the LIS schools of the state are not having common syllabus. Each school are following different syllabus as per UGC guidelines. So, there is an urgent need of uniform syllabus not only in the state of Assam but to the entire LIS schools of India.

Uniform Course Nomenclature:

Time has come to think of uniform course nomenclature throughout the country. For accepting the challenges coming to the way of individual libraries and LIS schools, one has to play a major role in taking the responsibility for the same.

CBCS:

Choice Based Credit System (CBCS) will be a boon for the students, if it is imparted in proper way. The scenario is just opposite. It is for the name sake that some of the LIS schools in Assam as well as other LIS schools of the country are following CBCS system. To follow this system in real sense, first of all the LIS Schools of the country must follow the uniform syllabus. Then only the credit earned by the individual student can be transferred, and one can have the freedom to choose any subject or value added courses of their choice in any LIS schools of the country.

Role of UGC:

The UGC may make it mandatory for all the LIS schools of the country to follow same and uniform curricula for the same courses, i.e. Certificate, Diploma, BLISc, MLISc, MPhil, PhD, etc. A very few universities are providing PGDLAN course, which is not recognised by the UGC and the governments. So, this type of courses should be also brought in the main frame in the form of additional / desirable qualifications and importance should be given for such type of courses in future. Courses like Post Graduate Diploma in Library Automation and Networking (PGDLAN), Post Graduate Diploma in Digital Library (PGDDL), Post Graduate Diploma in Preservation and Conservation of Documents (PGDPCD), Post Graduate Diploma in Library Management (PGDLM), Post Graduate Diploma in Library Archiving (PGDLA), etc. can be started and permission should be accorded by the UGC to all LIS schools to accept the technological challenges in the this technologically changing world. INFLIBNET Centre Gandhinagar (an IUC of UGC) is playing a major role for the libraries and

LIS Education for entire North Eastern Region of India by conducting manpower training courses, workshops, etc. every year; and providing free SOUL 2.0 software and e-resources to those colleges and universities which are recognised under 12 B and 2F section of UGC Act 1956. From time to time IFLIBNET centre is also proving man power training on various aspects of LIS like use and application of latest trends, etc. In April 2016 all the teachers of LIS schools of north eastern region of India were trained on the recent trends in ICT at Gandhinagar.

Integrated Courses:

Today as there is no fixed guideline by the UGC, so the LIS schools of the country are imparting various integrated course in library and information science as per their self styled structure. Integrated courses like two years (four semester) integrated course, three years (six semester) integrated course, five years (ten semester) integrated course MLISc/ MLibISc, and one year (two semester) BLISc/BLibISc courses and one year (two semester) MLISc/MLibISc courses are being rendered by the LIS schools of India. In ODL system in addition to UG and PG courses, the schools are also offering certificate, diploma courses which are of different time frame like three months, six months, one years, etc depending upon the system of concerned schools/universities.

LIS Education in Colleges:

It has come to the notice that a few states are imparting BA Honours in Library and Information Science course of three years duration whereas MA/MSc in Library and Information Science is of two years duration. This is not a good sign for the development of subject. In the job market the post are very limited and the government is not giving much importance to it throughout the country. In many institutions/organisations the vacant posts are not filled up on regular basis.

Future of LIS Education:

Due to mushroom growth of LIS schools in India, the production of library professionals are increasing day by day just like the fifth law of library science. Now the demand is less but production is more. So the future of LIS education is not encouraging in India in general and Assam in particular. The stake holders must take some initiatives for the betterment of LIS education; otherwise the day is not far away when the LIS schools

will be forced to discontinue and stop imparting LIS education in the country. These types of situations are already noticed in the country like USA where it was ranked seventh (according to a survey) among all profession and today many LIS schools are forcefully closed down.

Regular Up-datation of Syllabus/Courses:

After 2001, the LIS education in India is not given much importance by the government. The course curricula are not updated regularly. A committee was set up in 2004 for the course curriculum development, but no report was submitted by that committee to the UGC due to reason best known to the committee members only. And after that no initiative has been taken by the UGC or the government. So, in absence of proper guidelines all the LIS schools have framed their own curriculum following the Karsiddappa Committee Report of 2001 with addition and deletion as per the need of the hour. Today the world is changing very fast in all dimensions and directions. The LIS schools are also adopting the changes which are coming to their way, which leads towards the adoption of different course curriculum by the different schools. It has become very important that a uniform course curriculum must be adapted at the earliest for the betterment of LIS education.

Mushroom Growth of LIS Schools:

In spite of having full time regular courses in library and information science, a number of LIS schools are coming up at different parts of India in ODL mode. Some of the university has started self funding library and information science course at UG and PG level for generating fund for the university, which is not a good sign for the profession. Open schools and open universities are admitting students without any limitations of seats in various courses of library and information science, which is again not a good sign for the subject as well as profession. Library and Information Science is treated as professional course and no professional course can be imparted through distance mode. It may be mentioned that like medical and engineering courses cannot be imparted through distance mode, so the LIS education should not be allowed to continue in distance mode. If it is done so, the mushroom growth of LIS education can be minimised rather controlled.

Internship:

To have practical exposure to the courses taught to the students in LIS schools in various areas, one has to understand the live working condition

in a library. In the schools theoretical knowledge are given more in comparison to practical knowledge, so all the LIS schools must have a provision of internship in the last semester of respective courses to understand the subject in better way.

Accreditation of Courses:

Library and Information Science is a professional course, so like other professional courses there is a need to have an accreditation agency like NCTE, AICTE, MCI, etc. A national agency should be set up by the government for the accreditation of LIS as a professional course. Library and Information Science should be added as a subject in civil service examinations in Assam as well as India. APSC and UPSC should add it in the main subject list.

Suggestions:

The followings are some important and useful suggestions for improving LIS education in India in general and Assam in particular:

1. LIS schools must have a well equipped IT/ ICT laboratories in the ratio of 1:1.

2.Faculty strength and student teacher ratio must be maintained.

3. Vacant post must be filled up at the earliest to maintain the ratio.

4. Physical facilities like Space, modern teaching aids, physical environment, etc. should be procured for smooth conduct of the courses.

5. Seminars, Tutorials, Assignments, Debate and Field Study (academic tours) should be organised and integrated with course curricula for better exposure.

6. Syllabus should be revised regularly. Concerned faculties should be given liberty to revise 20% of syllabus as per the need and demand of time.

7.The LIS students must be sent for internship for at least one month to have training and practical exposure by working in all types of libraries in the final semester.

8. LIS schools should provide short term training programmes to teachers, librarians and other library professionals from time to time on latest trends in the profession.

9. To improve quality of research, talented and deserving as well as serious scholars should be given proper guidance.

10. The LIS schools should not adopt and acquire any new invention/ discovery/ development immediately without having proper knowledge of that subject by their faculties. The faculties should be allowed to get training in that subject, then only that new areas can be added to the syllabus.

11. All LIS schools may initiate campus recruitment for placement of their products.

Conclusion:

Today both students as well as teachers must be conversant with the changing trends due to explosion of literature, technology, etc. In this regard we have to highlight how far we are prepared to accept the challenges; whether the present course curriculum are relevant and compatible with the social change; whether it will serve the interest of common people or not? There are several questions coming to our mind regarding LIS education in Assam in general and India in particular. We have to accept the challenges coming to our way, but not at the cost of our profession. Only those relevant and most needed may be used for LIS professions. Time has come to give a face-lift to LIS education for the additional expansion of profession.

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5

A Brief History of the Department of Library and Information Science in North-Eastern Hill University (NEHU), Shillong

Jiarlimon Khongtim
Moses M. Naga

Introduction

In India, the library and information science education started when the first library school was established in Baroda, Maharashtra in the year 1911. But in Meghalaya, this education started with the establishment of the department of library and information science in the North-Eastern Hill University (NEHU) in the year 1985 under the leadership of Prof J. C. Binwal, who was then the librarian of the university central library. With the establishment of the department, the four semester integrated course leading to the degree of Master of Library and Information Science was introduced. Later on, the Ph. D programme was also started in the year 1989. The department holds the distinction of being the first in the country to offer a two-year integrated Master's degree in Library and Information Science (M. L. I. Sc) (NEHU annual report, 1999-2000). The department had just completed 33 years. Since its inception, the department had produced many library and information professionals holding different posts in the field in different institutions all over the country as well as in other countries.

Courses conducted

For the two years course in library and information science with four semesters, previously the department give provision that the first two

semesters will be for bachelor degree and another two semesters will be for master degree. So, those students who could not complete the course in one stretch can again take admission in the third semester later on. The admission in the third semester for master degree was also open for the students who completed their bachelor degree in the field from other recognised universities. Later, the two semesters for bachelor degree and another two semesters for master degree were converted into two years master degree with four semesters, which means that the students have to complete the course in one stretch for all the four semesters and the provision to take admission in the third semester was closed.

Outline of the syllabus

Semester	1985	1998	2003	2008	2013
Semester I	Library and Society	Library and Society	Foundations of Library and Information Science	Foundations of Library and Information Science	Foundations of Library and Information Science
	Organisation of Knowledge (Theory)	Organisation of Knowledge (Theory)	Organisation of Knowledge (Theory)	Knowledge Organisation - I (Theory)	Knowledge Organisation - I (Theory)
	Organisation of Knowledge (Practical)	Organisation of Knowledge (Practical)	Organisation of Knowledge (Practical)	Knowledge Organisation – I (Practice)	Knowledge Organisation – I (Practice)
	Information Services and Sources	Information Services and Sources	Information Sources and Services	Information Sources and Services	Information Sources and Services
	Job-Diary and Viva Voce	Job-Diary, Viva Voce and Study Tour Report	Introduction to Information Technology	Introduction to Information Technology	Foundation of Computer Application
Semester II	Library Management	Library Management	Database Management System	Library System Analysis & Design	System Analysis and Design
	Organisation of Knowledge (Theory)	Organisation of Knowledge (Theory)	Organisation of Knowledge (Theory)	Knowledge Organisation - II (Theory)	Knowledge Organisation - II (Theory)
	Organisation of Knowledge (Practical)	Organisation of Knowledge (Practical)	Organisation of Knowledge (Practical)	Knowledge Organisation – II (Practice)	Knowledge Organisation – II (Practice)
	Introduction to Information Technology	Introduction to Information Technology	Library Software Packages (Practical)	Library Software Packages (Practical)	Library Software Package (Theory and Practice)
	Tour Diary, Job Diary and Viva Voce	Information Sources on Environment	Library House Keeping Operations	Library House Keeping Operations	Library House Keeping Operations

Semester IV	Information and Literature Sources in any one of the following: a) Humanities b) Social Sciences c) Natural Sciences	Information and Literature Sources in any one of the following: d) Humanities e) Social Sciences f) Natural Sciences	Management of Library and Information Systems	Management of Library and Information Systems	Management of Library and Information Systems
	Information Technology	Computer Applications in Library and Information Services	Communication Technology and Digital Libraries	Digital Libraries	Digital Libraries
	Any one of the following: a) Information Systems and Services b) Reader Instruction	a) Information System and Services or b) Management of Information System	Optional paper- a) Agricultural Information Systems and Services b) Collection Development c) Knowledge Development, Representation and Management	Information Users and Their Needs	E- Learning and Content Management System (Theory and Practice)
	Project Report/ Dissertation on some current problem in Library and Information Science	Project Report/ Dissertation on some current problem in Library and Information Science	Project Report/ Dissertation on some current problem in Library and Information Science	Collection Development – II	Information Sources and Services (Practice)
	-	-	-	Project Report/ Dissertation	Dissertation

Source: The records available in the office of the Department and from the university annual reports

The above table shows the outline of the syllabus of the department as per the records available and the university annual reports. The syllabus was regularly revised from time to time and it was updated with the new developments in the field in order to be able to train and prepare the library and information professionals to keep abreast with the ever changing needs and requirements of the users. Regarding the Ph. D programme, many scholars have been awarded with Ph. D degree and many more are still continuing their research. The department also conducted the Ph. D course work for the research scholars who have been just admitted to the course which was made compulsory by the University Grants Commission (UGC). The syllabus of the Ph. D Course work is as follows:-

i) Research Methodology in Library and Information Science

ii) Advanced in Knowledge Management and Organisational Studies
iii) Advance in Library and Information Management
iv) Trends in Libraries and Librarianship
v) Advances in Information System Studies
vi) Review of Literature

Students Intake

For the post-graduate or master degree in library and information science course the department received more than 300 applicants every year from the graduated students with different honour subjects, out of which the department has to shortlist the candidates to call for the entrance written examination and select only the best 30 of them according to the enrolment capacity. Till date, the department had admitted many students from different parts of the North-East region as well as from the different parts of the country. There are many foreign students who joined the course from different countries such as from Myanmar, Bangladesh, China, Indonesia, Nigeria etc. for master degree as well as for Ph. D programme. But for Ph. D programme, the number of students admitted depends on the availability of the seats with the supervisors.

Number of students awarded with M. L. I. Sc Degree and Ph. D Degree

Sl. No	Degrees Awarded	Number of students awarded
1	M. L. I. Sc (1986 – 2018)	700 (Approximately)
2	Ph. D (1989 – 2018)	37

From the year of its establishment till now, the department had produced approximately 700 total number of master degree students and 37 total number of Ph. D degree holders in library and information science.

Study Tour

The second semester students of the course were also taken for study tour every year to visit the different libraries available in other parts of the country which is part of the course contents. The main objective was to expose the students to different well established and well organised libraries available in different parts of the country as well as in the nearby countries. The students have been taken for study tour to many metropolitan

cities like Delhi, Calcutta, Chennai, Pondicherry, Bangalore, Mysore, Mumbai, Goa and even to Kathmandu (Nepal). The libraries visited during the study tours are NASSDOC, Delhi University Library, INSDOC (now NISCAIR), British Council Library (Delhi), DESIDOC, Jawaharlal Nehru University Library (Delhi), Dr. Y.S Parmar University of Horticulture and Forestry (Solan), Parliament Library, Jaipur University Library, Indian Institute of Technology Library (Delhi), American Centre Library (Delhi), Punjab University Library, University of Delhi, Supreme Court Library, National Archives of India (Delhi), Jadavpur University Library (Kolkata), Indian Statistical Institute Library (Kolkata), British Council Library (Kolkata), National Library, Central Reference Library (Kolkata), American Information Resource Centre (Kolkata), Indian Institute of Technology Library (Kharagpur), Raja Rammohun Roy Library Foundation (Kolkata), Calcutta University Library, American Consulate Library (Kolkata), Central Library of Jodhpur University (Kolkata), Central Library of Indian Association for the Cultivation of Science (Kolkata), Asiatic Society Library (Kolkata), Bose Institute Library (Kolkata), Tribhuvan University Central Library (Kathmandu), Nepal Japan Children's Library (Kathmandu), American Library – The Library of Congress (Kathmandu Branch), Kathmandu Valley Public Library, Kathmandu University Library, Dr. Dilli Raman Kalyan Regmi Memorial Library and Museum (Kathmandu), Maharajganj Library of the Institute of Medicine and Nursing affiliated to Tribhuvan University (Kathmandu), Central Library of Goa University, Central Library of the National Institute of Oceanography - CSIR Lab (Goa), IIT Bombay; Central Library of the Tata Institute of Social Science (Mumbai), Central Library of the International Institute of Population studies (Mumbai), Library of the SNDT Women University (Mumbai), ASIATIC Society Library (Mumbai). The students were also allowed to visit the local libraries like State Central Library (Shillong), North Eastern Council Library (Shillong) etc. The students had to collect the essential information from the libraries visited during the study tour and submit the report to the department.

Internship

The internship for the PG students in the department of Library and Information Science was introduced in the year 2010. The main objective of introducing this programme was to provide the students with the hands-

on practical experience of the different activities in the libraries. After completing the fourth semester examination, the students have to attend the internship programme where they have to work in the NEHU central library for two months to get the internship certificate and then the students were divided into different groups and send to different college libraries to work for either one month or two months that depends on the college librarians.

Placement of students

Some of the students who passed out from the department joined as manager in Taylor and Francis Company, as Planning Officer cum Reference Librarian in State Central Library of Nagaland, College Librarians in Meghalaya, Nagaland, Manipur etc, Librarian of the Anthropological Survey of India in Shillong, as Lecturer of the Department, Assistant Librarian of the NEHU Central Library, Librarians of the Jowai Polytechnic as well as the Shillong Polytechnic, Librarian of the North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHM), Library Assistants of the North Eastern Indira Gandhi Regional Institute of Health and Medical Science (NEIGRIHM), as District Librarians, Llibrarian in ICFAI, Library Assistants in the State Central Library (Shillong), Librarian of the Nagaland University, Assistant Librarian of the Nagaland University, Librarian of the National Power Training Institute in Guwahati, Probationary officers in banks, State Government Employees, Assistant Librarians and Reference Librarian of the State Central Library (Shillong), as the School Librarians, Senior Library Assistant in the Indian Institute of Management (IIM) (Shillong), Assistant Professor in Pondicherry University, Senior Library Assistant of the Central Agriculture University (Meghalaya), Assistant Librarian in the Martin Luther Christian University (Shillong), Deputy Librarian of NEHU Central Library, Assistant Librarian of the Gauhati High Court Shillong Branch, Librarian of the Army public school Kolkata, Librarian of the Don Bosco Senior Secondary School in Guwahati, Semi-professional Assistant in Tripura Central University library, Assistant Professor of the Tripura Central University, Librarian of the nursing schools and many others.

Other activities

Besides the regular academic activities, the department was able to conduct other different professional development activities from time to

time such as workshops, seminars, international conferences etc. to help the library and information professionals of the region to update themselves with the current trends in the field. The faculty of the department also actively attended and participated in many professional development activities organised by the other institutions within the country as well as in the foreign countries.

Conclusion

With the remarkable growth and development of information technology, it has also changed the library and information profession. Thus, to keep track with these changes in the field, the department is striving to update and regularly revise its syllabus so that it can properly equip its students with the new knowledge and skills so that they can be at par with the new trends in the field. Workshops, seminars, conferences, refresher courses etc were conducted from time to time by the department in order to give chance to the professionals to update themselves with the new developments in the field.

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6

Enrolment Scenario of Library and Information Science Education in North-Eastern States of India: A Study

Shivendra Singh
Ramesh Pandita

Introduction: -

Library and Information Science as a subject discipline was introduced for the first time in the year 1886 at the University of Gottingen, Germany (Abdullahi, 2009), but it was with the efforts put in by the Melvil Dewey, who started first library science school at the University of Colombia in the year 1887, the subject discipline started receiving recognition (Richardson, 2010). Over the years, the Library Science as a subject discipline has grown at a very steady pace. In fact, it won't be inappropriate to say that compared to other subject disciplines which came into being around the same period, the Library Science did not receive an acceptance in the society to the same degree to which other subject disciplines received.

Library Science as a subject discipline is being recognized all across India, but the subject discipline has not grown proportionately all across the country including the north-Eastern region of India. The eight North-Eastern states are a few states of the country where the library and Information science has not grown in proportion to that of the rest of the country (Panigrahi, 2010, Kumar and Sharma, 2010). Given the fact the present study is an attempt to assess the enrolment scenario of LIS education in the North-Eastern states of India. Still more there is a growing notion among the LIS circles of the country, that Library and Information

Science education is increasingly becoming gender specific, as more and more female students prefer to pursue LIS education, while as at the same time a considerable decline is being seen in the male enrolment in the LIS schools of the country. Given the fact, an attempt would be made to assess the gender level enrolment scenario in LIS education in the North-Eastern states during the period 2011-12 to 2017-18.

Brief background information about North-East region: - The North-Eastern region of the Union of India comprises of eight states, which were also known as seven sister states prior to the inclusion of Sikkim. The other states of the region include, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura. The entire North-Eastern region of the country shares borders on three sides with the countries like, Nepal, Bhutan, Tibet, China, Myanmar and Bangladesh. The region has an approximate population of over 45.50 million having an average density of 116 persons per square km with an average sex ratio of 954 females per thousand males. The average literacy rate of NE region is 78.84%. These figures are far better than the average literacy and the sex ration of the country (Census, 2011).

Brief background information about lis education in North-East region of India: - In India imparting training in library services and activities was although introduced in the year 1911 by W.A Boarden in Baroda (Neelameghan, 1974), followed by the American Librarian Don Dickinson in 1915 (Khoo et al, 2009), but it was only in the year 1929, the Library Science as a subject discipline received recognition with the introduction of certificate course Library Science in Madras University by the father of Library Science in India, Dr. S.R Ranganathan (Agarawal, 1996). Gradually the subject discipline became popular all across the country and so was it introduced in the North-Eastern region of the country in the year 1966 as a one year BLIS programme in the Gauhati University by the then University Librarian Sh. Jogeswar Sarma. This unfolded the new dawn of LIS education in the North-Eastern states of the country and gradually the LIS courses were introduced in other universities all across the North-Eastern region. With the formation of Meghalaya as a state, the state was given North East Hill University (NEHU), which started imparting teaching in library science in the year 1985. Similarly, one year BLIS course was introduced in the Manipur University in the year 1986, Mizoram University

introduced BLISc in 2003 and DS College Gangtok Sikkim started BLISc in 2004 (Panigrahi, 2010). In the same way LIS courses where introduce by Tripura University, Nagaland and Arunachal Pradesh.

Problem statement: - Library and Information Science education in India has not received the type of recognition and kind of acceptance in the Indian social setup, which otherwise the subject discipline should have after being introduced in India nearly 110 years ago. A very disproportionate distribution and growth is being observed in the LIS education in India in general and North-Eastern region in particular. Given the fact it was conceived to assess the enrolment scenario of Library and Information Science education in the North-Eastern states of India.

Objectives of the study: -

***** To assess the overall enrolment scenario of Library and Information Science education in North-Eastern States of India

***** To work out gender based enrolment scenario of LIS education in North-Eastern states of India

***** To compare the enrolment scenario of library and information Science of North-Eastern states with the rest of India.

Related literature: -The Library and Information Science researchers in India have conducted a good number of studies, both at the national and regional level to assess the scenario of Library and information Science education in the country. Some of the common and general aspects which most of the researchers study include, the courses taught, the course duration, the intake capacity, the syllabi, the nomenclature of courses, the institutions offering LIS courses and more have been evaluated from time to time. Standardization of Library and Information Science courses throughout the country has been found as one of impelling problems (Panigrahi, 2010) whereby a considerable difference is being found in the nomenclature of the library science courses and the course content taught to the students. Panigrahi in his study gave an overall overview of the enrolment intake capacity of the ten East and North-Eastern states of the country. The researcher also discussed about the background information of LIS education in the North-East and Eastern states of the country and has also raised concerns towards the infrastructure and human resource development in these states. In a similar study (Kaur and Kaur, 2010)

reviewed the Library and Information Science education scenario in the six universities of Chhattisgarh and Madhya Pradesh. The researchers urged that there is a need to introduce two years integrated MLISc course in the twin states of central India. The researchers also discussed about the enrolment scenario of the universities under study and found that Jiwaji as the largest university to offer maximum 40 seats each in both BLISc and MLISc programmes.

Gokhale (2010) in her study gave an overview of the LIS education imparted in nine major institutions across Maharashtra. The researcher apart from highlighting the aspects like, courses offered and the course content taught in these schools also highlighted about the enrolment scenario of these institutions. The researcher has emphasized over the need to reorient the LIS education so as to suite the requirements of the present day information society. In a similar study, (Walia, 2010) while studying the scenario of LIS education in eight North Indian states, which include, Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Uttar Pradesh and Uttarakhand, the researcher also laid emphasis on the standardization of course content, nomenclature, course duration etc. The researcher observed that no uniformity is being observed across the LIS schools in North-India and also highlighted the enrolment scenario of LIS institutions in north India.

Down south, while studying the perspectives and challenges of LIS education across 27 LIS institutions in south India, (Varalakshmi, 2010) suggested the need for library professionals to be more innovative so as to able to meet the information needs of the ever changing knowledge society. The researcher also suggested the need to redesign the course curriculum on the lines of DRTC Bengaluru, in which balanced emphasis has been laid on various aspects keeping in view the information requirements of the contemporary society. While discussing the issues and trends of LIS education in India (Singh, 2010) emphasized the need to standardize the LIS education in the country by having a national level accreditation body. The researcher also emphasized on the need to overcome the challenges posed by the LIS job market, which is not working in a sustainable way. Singh in his study has also provided a comprehensive detailed list of institutes offering LIS education in the country along with the date of their establishment and the courses they offer. A similar study was conducted

by (Dutta and Das, 2001)**,** tabulating intuitions offering LIS education through regular and distance mode in India.

While giving the historical perspectives of Library and Information Science education India (Kumar and Sharma, 2010) laid the emphasis on the implementation of the recommendations of the National Knowledge Commission on the development of Library and Information Science education in India. The researcher also showed concern towards the mushrooming of library sciences schools with more emphasis on the quantity and less on the quality of education. This somewhere indicates towards the fact that enrolment in library science schools should be done on a sustainable basis, whereby demand and supply of the LIS job market should be kept in mind viz., opportunities towards the employability of LIS graduates should not freeze or decline. In a similar study (Joshi, 2010) gave an overview of the time to time initiatives taken by the government of India towards the promotion of library and Information Science education in the county. The researcher remarked that most of these committees constituted from time to time have recommended of establishing individual departments of Library and Information Science education in universities and colleges. The researcher also highlighted the remarks in the Status Report given alongside the CDC report (2001) about the undesirable growth of LIS courses all across the country.

Educational tourism has become one of the flourishing industries across the world, whereby students from under developing countries generally move to developing countries for pursuing research and higher education. India has become one of the preferred destinations for the students from SAARC and other African countries (Asundi and Karisiddappa, 2010). Most of these students from these countries come to India under ICCR fellowship to pursue Master's and doctoral studies in LIS in India**.**

Research methodology & scope of the study: - The study is based on All India Survey on Higher Education data retrieved from the official website of the Ministry of Human Resource Development Govt. of India. The Data were retrieved from http://aishe.nic.in/aishe/home on August 04, 2018 (AISHE). The data upon retrieval was in semi-structured form; as such the data were first structured keeping in view the objectives of the study. The study is based on the seven year data lasting for the period

2011-12 through 2017-18. The scope of the study is limited to the eight North-Eastern states of the country viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

Results: - The percentage at most of the places has been drawn up to two decimal places and has been rounded off to 100% figure. AS%-Annual Share percentage in all the tables has been drawn on the basis of total figures in that particular column. In the same way SS%-State Share Percent, CS%-Course Share Percent, GS%-Gender Share Percent, CS%-Caste Share Percent, CBS%-Caste Based Share Percent and ACG%-Annual Corresponding Growth in all the tables has been drawn by computing figures on the basis of total figures across the rows.

Table-1 Annual Enrolment distribution of LIS students in North-Eastern States

Category		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Avg	Total (%age)
Arunachal Pradesh	Frequency	-	-	2	2	62	101	75	34.57	242 (5.30)
	AS%	-	-	0.34	0.39	10.03	12.05	9.40	4.60	
	SS%	-	-	0.83	0.83	25.62	41.74	30.99	14.29	
	ACG%	-	-	-	-	-	62.90	-25.74	5.31	
Assam	Frequency	253	278	355	306	307	377	373	321.29	2249 (49.22)
	AS%	36.30	49.82	61.21	60.00	49.68	46.66	46.74	50.06	
	SS%	11.25	12.36	15.78	13.61	13.65	16.76	16.59	14.29	
	ACG (%)	-	9.88	27.69	-13.80	0.32	22.80	-1.06	6.55	
Manipur	Frequency	57	59	60	58	50	54	55	56.14	393 (8.60)
	AS%	8.18	10.57	10.34	11.37	8.09	6.68	6.89	8.87	
	SS%	14.50	15.01	15.27	14.76	12.72	13.74	13.99	14.28	
	ACG (%)	-	3.50	1.69	-3.33	-13.79	8.00	1.85	-0.30	
Meghalaya	Frequency	31	63	81	74	97	113	111	81.43	570 (12.48)
	AS%	4.45	11.29	13.97	14.51	15.70	13.99	13.91	12.55	
	SS%	5.44	11.05	14.21	12.98	17.02	19.82	19.47	14.28	
	ACG (%)	-	103.22	28.57	-8.64	31.08	16.49	-1.76	24.14	
Mizoram	Frequency	58	48	58	54	87	89	85	68.43	479 (10.48)
	AS%	8.32	8.60	10.00	10.59	14.08	11.01	10.65	10.46	
	SS%	12.11	10.02	12.11	11.27	18.16	18.58	17.75	14.29	
	ACG (%)	-	-17.24	20.83	-6.89	61.11	2.29	-4.49	7.94	
Nagaland	Frequency	260	80	-	16	15	05	14	55.71	390 (8.54)
	AS%	37.30	14.34	-	3.14	2.43	0.62	1.75	8.51	
	SS%	66.67	20.51	-	4.10	3.85	1.28	3.59	14.29	
	ACG (%)	-	-69.23	-100.00	-	-	-66.66	180.00	-7.98	
Sikkim	Frequency	9	12	5	-	-	-	22	6.86	48 (1.05)
	AS%	1.29	2.15	0.86	-	-	-	2.76	1.01	
	SS%	18.75	25.00	10.42	-	-	-	45.83	14.29	
	ACG (%)	-	33.33	-58.33	-100.00	-	-	-	-17.86	
Tripura	Frequency	29	18	19	-	-	69	63	28.29	198 (4.33)
	AS%	4.16	3.23	3.28	-	-	8.54	7.89	3.87	
	SS%	14.65	9.09	9.60	-	-	34.85	31.82	14.29	
	ACG (%)	-	-37.93	5.55	-100.00	-	0	-8.69	-20.15	
Total NE Region	Frequency	697	558	580	510	618	808	798	652.71	4569
	NES%	15.25	12.21	12.69	11.16	13.53	17.68	17.47	14.28	
	ACG (%)	-	-19.94	3.94	-12.06	21.17	30.74	-1.23	3.23	

AS%- Annual Share Percentage, SS% -State Share Percentage

Given the figures in Table-1, it can be emphatically said that the scenario of LIS education in the North-Eastern states of India is not that encouraging. Assam is the leading state of the North-East which had the maximum (2249) enrolments during the period, constituting 49.22% of the total enrolment in LIS education in North-Eastern states of India. Assam is distantly followed by Meghalaya and Mizoram with their overall enrolment share of 12.48% and 10.48% respectively. Manipur had an enrolment share of 8.60%, Nagaland 8.54%, Arunachal Pradesh 5.30%, Tripura 4.33% and Sikkim 1.05%. The Average Annual Corresponding Growth in the enrolment percentage in the entire North-Eastern region during the period of study was recorded 3.23%. At the state level Meghalaya recorded the maximum 24.14% Average Annual Corresponding Growth (AACG), followed by Mizoram with 7.94%, Assam 6.55% and Arunachal Pradesh 5.31%. It is equally worrisome that some of the states recorded negative growth in their enrolment percentage. Tripura recorded the maximum negative Average Annual Corresponding Growth of -20.15, which is followed by Sikkim with -17.86%, Nagaland -7.98%, and Manipur, -0.30%. There is a considerable decline in the enrolment in Nagaland and there is an urgent need to look into the reasons as what prompted to such a sharp decline in the enrolment in the state. If we look at the Annual Corresponding Growth (ACG) in the enrolment on a yearly basis, then every state has recorded negative growth in enrolment in one or the other year. The highest annual enrolment share percentage of North-Eastern states were recorded 17.68% in the year 2016-17 and the lowest 11.16% was recorded in the year 2014-15.

Table-2 Course wise enrolment distribution of LIS students

Name of the course		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Avg	Total N.E Region	Rest of India	Total
Diploma	Frequency	76	104	154	130	130	178	172	134.86	944	20605	21549 (5.11)
	AS%	10.09	18.64	26.55	25.49	21.04	22.03	21.55	20.77	20.66	4.94	
	CS%	0.35	0.48	0.71	0.60	0.60	0.83	0.80	0.62	4.38	95.62	
	ACG%	-	36.84	48.07	-15.58	0	36.92	-3.37	14.70	-	-	
B.Lib.I.Sc	Frequency	201	61	2	10	44	141	134	84.71	593	221683	222276 (52.72)
	AS%	28.84	10.93	0.34	1.96	7.12	17.45	16.79	11.92	12.98	53.15	
	CS%	0.09	0.03	0.00	0.00	0.02	0.06	0.06	0.04	0.27	99.73	
	ACG%	-	- 69.65	-96.72	400.00	340.00	220.00	-4.96	112.67	-	-	
B.Lib.Sc.	Frequency	32	35	27	24	24	24	23	27.00	189	38161	38350 (9.10)
	AS%	4.59	6.27	4.66	4.71	3.88	2.97	2.88	4.28	1.14	9.15	
	CS%	0.08	0.09	0.07	0.06	0.06	0.06	0.06	0.07	0.49	99.51	
	ACG%	-	9.37	-22.85	-11.11	0	0	-4.16	-4.11	-	-	
M.Lib.Sc.	Frequency	239	138	130	135	156	154	200	164.57	1152	42824	43976 (10.43)
	AS%	34.29	24.73	22.41	26.47	25.24	19.06	25.06	25.32	25.21	10.27	
	CS%	0.54	0.31	0.30	0.31	0.35	0.35	0.45	0.37	2.62	97.38	
	ACG%	-	-42.25	-5.79	3.84	15.55	-1.28	29.87	-0.01	-	-	
M.L.I.Sc.	Frequency	70	161	165	157	199	221	188	165.86	1161	36281	37442 (8.88)
	AS%	10.04	28.85	28.45	30.78	32.20	27.35	23.56	25.89	25.41	8.70	
	CS%	0.19	0.43	0.44	0.42	0.53	0.59	0.50	0.44	3.10	96.90	
	ACG%	-	130.00	2.48	-4.84	26.75	11.05	-14.93	21.50	-	-	
PG Diploma	Frequency	29	18	19	-	-	-	-	9.43	66	14231	14297 (3.39)
	AS%	4.16	3.23	3.28	-	-	-	-	1.52	1.44	3.41	
	CS%	0.20	0.13	0.13	-	-	-	-	0.07	0.46	99.54	
	ACG%	-	-37.93	5.55	-	-	-	-	-4.63	-	-	
M.Phil.	Frequency	5	5	7	4	12	15	18	9.43	66	1559	1625 (0.39)
	AS%	0.72	0.90	1.21	0.78	1.94	1.86	2.26	1.38	1.44	0.37	
	CS%	0.31	0.31	0.43	0.25	0.74	0.92	1.11	0.58	4.06	95.94	
	ACG%	-	0	40.00	-42.85	200.00	25.00	20.00	34.59	-	-	
Ph.D.	Frequency	45	36	76	50	53	75	63	56.86	398	3201	3599 (0.85)
	AS%	6.46	6.45	13.10	9.80	8.58	9.28	7.89	8.79	8.71	0.77	
	CS%	1.25	1.00	2.11	1.39	1.47	2.08	1.75	1.58	11.06	88.94	
	ACG%	-	-20.00	111.11	-34.21	6.00	41.50	-16.00	12.63	-	-	
Total	Frequency	697	558	580	510	618	808	798	652.71	4569	417080	421649
	Share%	0.17	0.13	0.14	0.12	0.15	0.19	0.19	0.16	1.08	98.92	

AS%- Annual Share Percentage, CS% -Course Share Percentage

In terms of course wise enrolment distribution of the students, the maximum 1161 (25.41%) students were enrolled in the MLISc programme, followed by 1152 (25.21%) in the M.Lib.Sc programme. There is a need to understand that both the programmes are equivalent, but there is a slight nomenclature difference, the former leads to a Master's Degree in Library and Information Sciences, while as, the lateral leads to Masters's Degree in Library Science. Even though the course content taught to the students in both the programmes is almost alike. Diploma in Library Science is one of the interesting finds in the North-Eastern region, as this programme recorded the third highest 944 (20.66%) enrolment share. Diploma in Library science is pursued by students after 10+2 level, while as PG Diploma in Library and Information Science is generally pursued after B.Lib.Sc or BLISc. At the Bachelor's level, it seems the BLISc programme is more popular and preferred by the students over B.Lib.Sc progamme, as compared to 12.98% enrolment share in BLISc, only 1.14% enrolment share was recorded in B.Lib.Sc programme. What is most interesting to know about the enrolment figures is that of the total enrolment in LIS programmes in North-Eastern states, 8.71% was recorded in the Ph.D programmes, while as, the enrolment share at the doctoral level in the rest of India during the same period remained meager 0.77% of the total national level enrolment.

In terms of Average Annual Corresponding Growth, BLISc Programme recorded the maximum 112.67% average growth, followed by M.Phill 34.59%, MLISc 21.50%, and Diploma 14.70%. However, the maximum negative (-16%) AACG was recorded in the Ph.D programme, followed by PG Diploma, which recorded (-4.63%), B.Lib.Sc (-4.11%) and M.Lib.Sc (-0.01%). AACG figures once again corroborated the fact that popularity and preference towards pursuing B.Lib.Sc and M.Lib.Sc courses among LIS students in the North-Eastern states is on decline, while as the popularity and preference among students towards BLISc and MLISc programmes is on increase. Similarly, M.Phill enrolment has shown appreciation than that of Ph.D programme. In the same way enrolment in the PG Diploma programme in on the decline, while as UG Diploma is still being preferred by the students. Of the total enrolment in LIS education across the country during the period of study only 1.08% students were enrolled in the North-Eastern states of the country, while as the remaining 98.92% enrolments were from the rest of the country. Even though nearly 50% of the total LIS enrolment in the North-Eastern region come alone from Assam, while as, at the national level same figures of Assam constitute only half the percent of the total national LIS enrolment.

Table-3 Caste wise annual enrolment Distribution of LIS students in North-Eastern states

Year → Category↓		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Avg	Total N.E Region	Rest of India	Total
SC	Frequency	32	28	43	24	25	48	36	33.71	236	47553	47789 (11.33)
	AS%↓	4.59	5.02	7.41	4.71	4.05	5.94	4.51	5.18	5.17	11.40	
	CS%	13.56	11.86	18.22	10.17	10.59	20.34	15.25	14.29	0.49	99.51	
	ACG%	-	-12.50	53.57	-44.18	4.16	92.00	-25.00	9.72	-	-	
ST	Frequency	95	127	159	146	206	254	271	179.71	1254	14067	15321 (3.63)
	AS%↓	13.63	22.76	27.41	28.63	33.33	31.44	33.96	27.31	27.45	3.37	
	CS%	7.58	10.13	12.68	11.64	16.43	20.26	21.61	14.33	8.18	91.82	
	ACG%	-	33.68	25.19	-8.17	41.09	23.30	6.69	17.40	-	-	
OBC	Frequency	75	129	174	131	134	142	162	135.29	947	120757	121704 (28.86)
	AS%↓	10.76	23.12	30.00	25.69	21.68	17.57	20.30	21.30	20.73	28.95	
	CS%	7.92	13.62	18.37	13.83	14.15	14.99	17.11	14.29	0.78	99.22	
	ACG%	-	72.00	34.88	-24.71	2.29	5.97	14.08	14.93	-	-	
Foreign Students	Frequency	2	0	1	3	0	2	3	1.57	11	103	114 (0.03)
	AS%↓	0.29	0	0.17	0.59	0	0.25	0.38	0.24	0.24	0.02	
	CS%	18.18	0.00	9.09	27.27	0.00	18.18	27.27	14.29	9.65	90.35	
	ACG%	-	-100	0	200.00	-100	0	50.00	7.14	-	-	
Others	Frequency	493	274	203	206	253	362	326	302.43	2121	234600	236721 (56.14)
	AS%↓	70.73	49.10	35.00	40.39	40.94	44.80	40.85	45.97	46.42	56.25	
	CS%	23.24	12.92	9.57	9.71	11.93	17.07	15.37	14.26	0.90	99.10	
	ACG%	-	-44.42	-25.91	1.47	22.81	43.08	-9.94	-1.84	-	-	
Total	Frequency	697	558	580	510	618	808	798	652.71	4569	417080	421649
	Share%	15.25	12.21	12.69	11.16	13.53	17.68	17.47	14.29	1.08	98.92	
	ACG%	-	-19.94	3.94	-12.06	21.17	30.74	-1.23	3.23	-	-	

AS%- Annual Share Percentage, CS% -Caste Share Percentage ACG%- Annual Corresponding Growth Percentage

If we look at the caste based enrolment scenario in LIS education in the North-Eastern states, irrespective of the gender and the programme, then of the total enrolments made during the period of study, 5.17% students enrolled were SC students, 27.45% ST students, 20.73% OBC students, 0.24% foreign students, and 46.42% others. If we compare the caste based enrolment scenario of North- Eastern states with the rest of India, then of the total SC students enrolled across India in LIS programs, 0.49% are from North-East, similarly, ST students comprise 8.18%, OBC comprise 0.78% and foreign students comprise 9.65%. Average Annual Corresponding Growth among all the caste groups witnessed a positive growth, which is quite encouraging, however a negative growth of -1.84% was recorded among other caste categories. Also, it seems that North-East is one of the most preferred destinations in India among foreign students to pursue LIS education.

Table-4 Course wise caste based enrolment distribution of LIS students in NE states

Category		SC	ST	OBC	Foreign Students	Others	Total N.E Region	Total India
Diploma	Frequency	52	93	320	1	478	944	21549 (5.11)
	CBS%	22.03	7.39	33.79	9.09	22.58	20.66	
	CS%	5.51	9.85	33.90	0.11	50.64	4.38	
B.Lib.I.Sc	Frequency	20	72	6	-	495	593	222276 (52.72)
	CBS%	8.47	5.72	0.63	-	23.38	12.98	
	CS%	3.37	12.14	1.01	-	83.47	0.27	
B.Lib.Sc.	Frequency	5	25	99	-	60	189	38350 (9.10)
	CBS%	2.12	1.99	10.45	-	2.83	4.14	
	CS%	2.65	13.23	52.38	-	31.75	0.49	
M.Lib.Sc.	Frequency	46	381	195	-	530	1152	43976 (10.43)
	CBS%	19.49	30.29	20.59	-	25.04	25.21	
	CS%	3.99	33.07	16.93	-	46.01	2.62	
M.L.I.Sc.	Frequency	54	488	264	2	353	1161	37442 (8.88)
	CBS%	22.88	38.79	27.88	18.18	16.67	25.41	
	CS%	4.65	42.03	22.74	0.17	30.40	3.10	
PG Diploma	Frequency	15	3	3	-	45	66	14297 (3.39)
	CBS%	6.36	0.24	0.32	-	2.13	1.44	
	CS%	22.73	4.55	4.55	-	68.18	0.46	
M.Phil.	Frequency	0	59	3	-	04	66	1625 (0.39)
	CBS%	0	4.69	0.32	-	0.19	1.44	
	CS%	0.00	89.39	4.55	-	6.06	4.06	
Ph.D.	Frequency	44	137	57	8	152	398	3599 (0.85)
	CBS%	18.64	10.89	6.02	72.73	7.18	8.71	
	CS%	11.06	34.42	14.32	2.01	38.19	11.06	
Total	Frequency	236	1258	947	11	2117	4569	421649
	Share%	5.17	27.53	20.73	0.24	46.33	1.08	

SC-Scheduled Caste, ST-Scheduled Tribe, OBC-Other Backward Cast, NE-North East. CBS%-Category Based Share Percentage, CS% -Course Share Percentage, ACG%-Annual Corresponding Growth Percentage

If we look at the caste based preference among students to pursue LIS programmes, then of the total SC students from North-East during the period of study, 22.88% were enrolled in MLISc programme, 22.03% in UG Diploma Course, 19.49% in M.Lib.Sc programme and 18.64% were pursuing a doctoral degree. Similarly, majority 38.79% ST students were enrolled in MLISc programme, followed by 30.29% in M.Lib.Sc. Among OBC students, the majority 33.79% were enrolled in a UG Diploma programme, followed by 27.88% in MLISc programme. Accordingly, the majority of the foreign students were found pursing their doctoral degrees in North-Eastern states. The majority 25.04% students from others were enrolled in MLISc programme, followed by 23.08% in BLISc programme. Given the percentage of students enrolled in the MLISc and BLISc programmes from different castes, it once again corroborates that MLISc and BLISc are the most preferred LIS programmes among the North-Eastern students. The majority of the students enrolled in the Diploma, BLISc, M.Lib.Sc, PG Diploma and Ph.D are from others, while as in B.Lib.Sc majority of the students enrolled were from OBC category, in MLISc and M.Phill, the majority of students enrolled are from ST category.

Table-5 State wise gender based enrolment distribution of LIS students in North-Eastern states of India

Name of the course		2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		Total		Gross total (%age)
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Arunachal Pradesh	Frequency	-	-	-	-	-	2	1	1	37	25	56	45	44	31	138	104	242 (5.30)
	GS%	-	-	-	-	-	0.36	0.43	0.36	12.67	7.67	14.58	10.61	11.99	7.19	6.23	4.42	
	SS%	-	-	-	-	-	0.83	0.41	0.41	15.29	10.33	23.14	18.60	18.18	12.81	57.02	42.98	
Assam	Frequency	106	147	102	176	128	227	143	163	140	167	159	218	152	221	930	1319	2249 (49.22)
	GS%	23.77	58.57	38.06	60.69	56.64	64.14	61.90	58.42	47.95	51.23	41.41	51.42	41.42	51.28	42.01	56.01	
	SS%	4.71	6.54	4.54	7.83	5.69	10.09	6.36	7.25	6.22	7.43	7.07	9.69	6.76	9.83	41.35	58.65	
Manipur	Frequency	23	34	23	36	23	37	19	39	20	30	30	24	26	29	164	229	393 (8.60)
	GS%	5.16	13.55	8.58	12.41	10.18	10.45	8.23	13.98	6.85	9.20	7.81	5.66	7.08	6.73	7.41	9.72	
	SS%	5.85	8.65	5.85	9.16	5.85	9.41	4.83	9.92	5.09	7.63	7.63	6.11	6.62	7.38	41.73	58.27	
Meghalaya	Frequency	4	27	26	37	36	45	34	40	40	57	51	62	45	66	236	334	570 (12.48)
	GS%	0.90	10.76	9.70	12.76	15.93	12.71	14.72	14.34	13.70	17.48	13.28	14.62	12.26	15.31	10.66	14.18	
	SS%	0.70	4.74	4.56	6.49	6.32	7.89	5.96	7.02	7.02	10.00	8.95	10.88	7.89	11.58	41.40	58.60	
Mizoram	Frequency	30	28	28	20	29	29	27	27	48	39	48	41	49	36	259	220	479 (10.48)
	GS%	6.73	11.16	10.45	6.90	12.83	8.19	11.69	9.68	16.44	11.96	12.50	9.67	13.35	8.35	11.70	9.34	
	SS%	6.26	5.85	5.85	4.18	6.05	6.05	5.64	5.64	10.02	8.14	10.02	8.56	10.23	7.52	54.07	45.93	
Nagaland	Frequency	260	-	80	-	-	-	7	9	7	8	5	-	14	-	373	17	390 (8.54)
	GS%	58.30	-	29.85	-	-	-	0.03	3.23	2.40	2.45	1.30	-	3.81	-	16.85	0.72	
	SS%	66.67	-	20.51	-	-	-	1.79	2.31	1.79	2.05	1.28	-	3.59	-	95.64	4.36	
Sikkim	Frequency	3	6	3	9	4	1	-	-	-	-	-	-	6	16	16	32	48 (1.05)
	GS%	0.67	2.39	1.12	3.10	1.77	0.28	-	-	-	-	-	-	1.63	3.71	0.72	1.36	
	SS%	6.25	12.50	6.25	18.75	8.33	2.08	-	-	-	-	-	-	12.50	33.33	33.33	66.67	
Tripura	Frequency	20	9	6	12	6	13	*	*	*	*	35	34	31	32	98	100	198 (4.33)
	GS%	4.48	3.59	2.24	4.14	2.65	3.67	-	-	-	-	9.11	8.02	8.45	7.42	4.43	4.25	
	SS%	10.10	4.55	3.03	6.06	3.03	6.57	-	-	-	-	17.68	17.17	15.66	16.16	49.49	50.51	
Total NE Region	Frequency	446	251	268	290	226	354	231	279	292	326	384	424	367	431	2214 (48.46)	2355 (51.54)	4569
	GS%→	20.14	10.65	12.10	12.31	10.20	15.03	10.43	11.84	13.18	13.84	17.34	18.00	16.57	18.30			

GS%- Gender Share Percentage, SS% -State Share Percentage, NES%- North East Share Percentage, RS%-Rest of India Share Percentage

On the whole, during the period of study, of the total enrolled students in different LIS courses in North-Eastern states 48.46% are male students and 51.54% are female students. The male-female enrolment ratio in the North-Eastern LIS schools is almost evenly poised. The proportionate gender based enrolment distribution is always welcome and perhaps something for which we all most of the time strive for, especially in the Indian context, where a considerable difference in being found in the enrolment among boys and girls, especially at the school level. This also somewhere signifies that Library and Information education in particular and the LIS profession in general is equally preferred by both boys and girls across the North-Eastern states of India, which again is a welcome scenario. Sikkim recorded the 66.67% female enrolment against 33.3% male enrolment, which is highest among all the North-Eastern states. It is equally noteworthy that in states like Assam, Manipur, Meghalaya and Tripura compared to male students, higher percentage female student were enrolled, while as, lower percentage of female enrolment was recorded in Arunachal Pradesh, Mizoram and Nagaland. In Nagaland against 95.64% male enrolment, only 4.36% female enrolment was recorded, which is lowest in the region and may also be lowest in the country. If we look at the total gender level share percentage at the regional level, then only in the year 2011-12, the enrolment percentage of boys was recorded higher than the girls and for the remaining period the girls outnumbered the boys. Here it can also be emphatically said that female students are more inclined towards the LIS education in general and the LIS profession in particular. Even the possibility cannot be ruled out that in the coming years, the LIS education may become more female centric.

Table-6 Course wise gender based enrolment distribution of in library science schools in North-Eastern states of India

Name of the course		2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		Total		Gross total (%age)
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Diploma	Frequency	34	42	54	50	62	92	76	54	76	54	90	88	72	100	464	480	944 (20.66)
	AS%	7.62	16.73	20.15	17.24	27.43	25.99	32.90	19.35	26.03	16.56	23.44	20.75	19.62	23.20	20.96	20.38	
	CS%	3.60	4.45	5.72	5.30	6.57	9.75	8.05	5.72	8.05	5.72	9.53	9.32	7.63	10.59	49.15	50.85	
B.Lib.I.Sc	Frequency	201	-	61	-	-	2	2	8	25	19	75	66	75	59	439	154	593 (12.98)
	AS%	45.07	-	22.76	-	-	0.56	0.87	2.87	8.56	5.83	19.53	15.57	20.44	13.69	19.83	6.54	
	CS%	33.90	-	10.29	-	-	0.34	0.34	1.35	4.22	3.20	12.65	11.13	12.65	9.95	74.03	25.97	
B.Lib.Sc.	Frequency	10	22	09	26	04	23	5	19	10	14	5	19	9	14	52	137	189 (4.14)
	AS%	2.24	8.76	3.36	8.97	1.77	6.50	2.16	6.81	3.42	4.29	1.30	4.48	2.45	3.25	2.35	5.82	
	CS%	5.29	11.64	4.76	13.76	2.12	12.17	2.65	10.05	5.29	7.41	2.65	10.05	4.76	7.41	27.51	72.49	
M.Lib.Sc.	Frequency	138	101	62	76	55	75	55	80	76	80	83	71	106	94	575	577	1152 (25.21)
	AS%	30.94	40.24	23.13	26.21	24.34	21.19	23.81	28.67	26.03	24.54	21.61	16.75	28.88	21.81	25.97	24.50	
	CS%	11.98	8.77	5.38	6.60	4.77	6.51	4.77	6.94	6.60	6.94	7.20	6.16	9.20	8.16	49.91	50.09	
M.L.I.Sc.	Frequency	17	53	52	109	55	110	61	96	68	131	85	136	55	133	393	768	1161 (25.41)
	AS%	3.81	21.12	19.40	37.59	24.34	31.07	26.41	34.41	23.29	40.18	22.14	32.08	14.99	30.86	17.75	32.61	
	CS%	1.46	4.57	4.48	9.39	4.74	9.47	5.25	8.27	5.86	11.28	7.32	11.71	4.74	11.46	33.85	66.15	
P.G Diploma	Frequency	20	09	6	12	6	13	-	-	-	-	-	-	-	-	32	34	66 (1.44)
	AS%	4.48	3.59	2.24	4.12	2.65	3.67	-	-	-	-	-	-	-	-	1.45	1.44	
	CS%	30.30	13.64	9.09	18.18	9.09	19.70	-	-	-	-	-	-	-	-	48.48	51.52	
M.Phil.	Frequency	3	2	3	2	5	2	1	3	4	8	5	10	12	6	33	33	66 (1.44)
	AS%	0.67	0.80	1.12	0.69	2.21	0.56	0.43	1.08	1.37	2.45	1.30	2.36	3.27	1.39	1.49	1.40	
	CS%	4.55	3.03	4.55	3.03	7.58	3.03	1.52	4.55	6.06	12.12	7.58	15.15	18.18	9.09	50.00	50.00	
Ph.D.	Frequency	23	22	21	15	39	37	31	19	33	20	41	34	38	25	226	172	398 (8.71)
	AS%	5.16	8.76	7.84	5.17	17.26	10.45	13.42	6.81	11.30	6.13	10.68	8.02	10.35	5.80	10.21	7.30	
	CS%	5.78	5.53	5.28	3.77	9.80	9.30	7.79	4.77	8.29	5.03	10.30	8.54	9.55	6.28	56.78	43.22	
Total	Frequency	446	251	268	290	226	354	231	279	292	326	384	424	367	431	2214	2355	4569
	Share%	9.32	5.30	5.73	6.08	4.82	7.46	5.06	6.11	6.39	7.14	8.40	9.28	8.03	9.43	48.46	51.54	

AS%- Annual Share Percentage, CS%-Course Share Percentage, M-Male, F-Female

A considerable difference can be observed at the gender level in the enrolment percentage under different LIS programmes. Compared to 50.09% females, 49.15% male students were enrolled in the UG Diploma courses. A considerable difference can be found in the male-female enrolment ratio in BLISc programme, in which compared to 74.03% male students, only 25.97% females were enrolled. Contrary to it, compared to 27.51% male students, 72.49% females were enrolled in B.Lib.Sc. The enrolment ratio between boys and girls is evenly poised in M.Lib.Sc programme, as compared to 49.91% male students, 50.09% females were enrolled. Disproportionate enrolment percentages can be seen in MLISc programme, as compared to 33.85% male students, 66.15% female students were enrolled during the period of study. The enrolment percentage of PG Diploma and M.Phill are also evenly poised among male and female students, however, a slightly higher percentage of male students were found pursing doctoral degree than their female counterparts. Of the total male enrolments made during the period of study, the majority 25.97% were pursing M.Lib.Sc course, followed by 20.96% UG Diploma course. Similarly of the total female enrolments made during the period of study, the majority 32.61% were pursing MLISc programme, followed by 24.50% in M.Lib.Sc. Among both male and female students, M.Phill appears to be the least preferred choice, as the minimum 1.40% each of male and female students were found pursing M.Phill programme.

FINDINGS AND DISCUSSION: - The meager enrolment share of slightly over 1% in the overall enrolment of LIS education in India itself speaks about the enrolment scenario of LIS education in the North-Eastern states of the country. There is an urgent need to put in efforts to improve the enrolment scenario of LIS education in the North-Eastern states in general and Tripura & Sikkim in particular. Of the total eight North-Eastern states four have recorded the positive average annual corresponding growth, while as four have recorded negative growth. So again somewhere there is a need to look for the reasons as why negative growth in the LIS enrolment is all such states. If we look at the gender level enrolment scenario in North-Eastern states, then Nagaland reflects the worst scenario of male-female enrolment ratio, where against 95.64% males only 4.36% female students were enrolled during the period of study. The good thing is that from the year 2014-15 onwards there is a steady increase in the overall enrolment in LIS education in North-Eastern states.

From the enrolment scenario across different LIS programmes in North-Eastern states it is evident that BLISc and MLISc programmes are the most preferred courses over the conventional B.Lib.Sc and M.Lib.Sc course. This gets also corroborated by the fact that positive average annual corresponding growth was recorded against BLISc and MLISc courses, while as negative growth was recorded against B.Lib.Sc and M.Lib.Sc programmes. This signifies the need towards renaming all the conventional LIS courses as per the newly accepted nomenclature, even though the course content taught in both the courses is almost alike. A good percentage of students in the North-East after completing their Master's Degree, prefer to pursue a doctoral degree, which gets corroborated by the fact that of the total LIS enrolment in North-Eastern states, nearly 9% were enrolled in Ph.D programmes. A fair amount of enrolment representation was almost recorded from students belonging to different cast groups. In fact, it is quite encouraging to see that student's belonging to different caste groups are actively pursuing research leading to their doctoral degrees.

In terms of gender, both male and female students are enrolled in almost equal proportion, with females having a slight edge over male students. A higher percentage of female enrolment in states like Sikkim, Assam, Manipur, Meghalaya and Tripura somewhere also indicates towards the fact that girl students are fairly inclined towards LIS education. Except for the year 2011-12, a higher percentage of female students were enrolled during the period of study. Despite having equal proportions of overall enrolment in LIS education, some courses were found in which disproportionate enrolment percentages were observed among male and female students. Like, nearly 75% students enrolled in BLISc were males, and over 72% students enrolled in B.Lib.Sc were females. Similarly, over 66% students enrolled in MLISc, were females.

Conclusion: - The North-Eastern states of India constitute nearly 3.75% of the country's total population, which also in a way means that North-Eastern states should ideally contribute nearly 3.75% of the total country's development and should also enjoy the share in the country's productivity to the same proportion and so should be their participation to the same proportion at all levels. But, if we look at the overall enrolment share of north-eastern students in country's overall LIS education, then it constitutes meager 1.08%, which again is far less than its true potential of

participation and contribution, which should have been around 3.75%. Given the fact, there is a need to improve the enrolment in LIS education in North-Eastern states so as to bridge the existing enrolment gap of nearly 2.70%. There is no considerable gender based difference in the enrolment in LIS education in North-Eastern states, but still Nagaland presents a worrisome picture, hence deserves attention at all levels. Although, compared to males, a higher percentage of female students were found enrolled in the North-Eastern states, but that does not present any worrisome picture, whereby it may be inferred that LIS profession or for that matter LIS education is becoming female centric in India in general and North-Eastern region in particular.

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Library and Information Science Education in North East India: a study

Alok Kumar Pathak

Introduction

North East India is commonly known as the seven sisters, as it consists of the seven states- Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura. Later Sikkim has also been included in North Eastern Region. The North East India covers up an area of 262,230 km (101,250qm miles) and possess a population of 45,772,188 (Census of India 2011).

The library tradition in the North East India is an old tradition from the days of ancient Kamrupa the 5th century AD. Scholastic and literary activities centering round the Sanskrit shastras have conducted by the Royal court and the Gurugrihas that representeded the academic librarianship in its indigenous form. It continues the already existing tradition of special librarianship in Assam in the form of 'Gandhia Bhoral' i.e. Royal archive where historical chronicles written in prose were preserved since 13 th century during Ahom regime. The Satras and the Namgharas were repositories of Neo-Vaishnavite literature and served like public libraries. Library and Information Science education in North East India began in the late 1960's. At presents there are eight State and centrally funded Universities in North East India offering Library and Information science courses.

LIS education in Assam

Gauhati University

The Gauhati University was established in 1948 under the Gauhati University Act 1947 (Assam Act xvi of 1947) and the department of Library science was started as evening course in the year 1966 with the leadership

of the then University Librarian Dr, Jogeswar Sarma as head of the department. Gauhati University is the first University of North East India to have introduced the department of Library Science. Firstly, in 1966/67 one-year Bachelor degree programme leading to BLISc and later in 1979 one-year Master degree programme leading to M Lib Sc was started in the department. The Nomenclature of both B.Lib.Sc and M.Lib.Sc has been change to BLISc and MLISC in 1984 and renaming the department as Library and Information Science. The BLISC and MLISc courses become full time day courses in 1984 with revised syllabus. The Two-year integrated Master degree programme leading to MLISc was introduced from the academic session 2001-02. The department has produced MLISc and Ph.D. holder of LIS professionals and contributed a lot to the development of LIS professional particularly in North East India.

Courses Offered: The one year BLISC and MLISC were continuing upto 2001/01. From the year 2001/02 the department is conducting two-year integrated Master of Library and Information Science (MLISc) with four semesters. The department introduced Master of Philosophy (MPhil) course in LIS and also having research programme in LIS, Doctor of philosophy (Ph.D) course from 1989.

ICT Infrastructure: The department has a well equipped computer laboratory with internet connectivity. Twenty five nos of computer are installed for normal computer practice like word processing using MS office, internet etc and the computer laboratory is used for practice of library software such as SOUL,KOHA,GSDL and D space by student s and research scholars.

Intake capacity: The intake capacity of the MLISc classes is 25(Twenty five), for MPhil 6 (Six) and Ph.D as per ordinance and statue of the University.

Faculty strength: The department has three professors and three Assistant professors.

Till 31st December 2018, Seventy one research scholars have been awarded Ph.D, 10 nos. students awarded MPhil and more than five hundred students possess MLISc Degree from the department.

Dibrugarh University

The Dibrugarh University was established in 1965 under the provision of Dibrugarh University Act 1965 enacted by Assam Legislative Assembly.

This is the second University to be set up in the state of Assam for the expension of higher education, particularly the teaching of the science and technology subject. Diburagh University is a teaching –cum-affiliating University with residential facilities.

The centre for Library and Information Science studies (CLISS) in Dibrugarh University was established in January,2005 in view of impart education and practical training in Library and Information services. One year BLISC course was introduced with intake of 24 students. Again in 2007 one year MLISc (two semesters) programme was introduced with intake of 20 students. Both the BLISc and MLISc courses are of one year duration. The centre for Library and Information science studies of Dibrugarh University is developing in production of efficient professional trained manpower, meeting the need of the libraries in North East India.

Faculty strength: There is no any permanent faculty in the department. The department is running by the three contractual Assistant professor with the Librarian incharge of Dibrugarh University as the Head of the department.

Till today the CLISS of Dibrugarh University product total 335 BLISc and 229 MLISc degree holder.

Assam University, Silchar

Assam University which is a central University was established in the year 1994 by the Act of the Indian parliament (Act xxiii of 1989). The department of Library science has been established in the year 2009 under the school of Information Sciences. Now the department has been placed under separate school" Swami Vivekananda School of Library Science" since 2011. From the 2010 academic session, the department has started two year integrated MLISc course consisting four semesters with intake of 25 students. The DLIS has started the research programme leading to M.Phil and Ph.D.

ICT Infrastructure: Twenty Five Numbers computer has been installed in ICT labouratory to meet the needs of students and research scholars.The department has been using the modern ICT tools and techniques for classroom teaching and learning.

Intake Capacity: For MLISC 25 seat, M.Phil-5 seat and number of Ph.D. seat are as per ordinance and Statute.

Faculty Strength: The total number of faculties are four including One Professor, One Associate Professor and two Assistant Professors.

The department product 178 MLISC, 10 M.Phil and 11 Ph.D till 2018. Three Student persuing M.Phil and Nine research scholar persuing Ph.D under the guidance of three faculties of the department.

Assam Women's University, Jorhat

This University was established by the act of xxii of 2013 of Assam Legislative Assembly as State University vide notification LGL 149/2011/ 92 dated 21.8.2013. It is the first Women University of the North East India. The department of Library and Information Science was established in the year 2015 with a view to equip the libraries with trained women power.

The objectives of the department are (a) To introduce modern management technique to students to manage libraries and information centre effectively (b) To develop skills by using computer and communication technology (c) To assist students in identifying and learning the major issues in the development of new technologies in the libraries (d) To introduce the different methods and techniques of research.

Courses Offered: MLIS-The department is offering two year Master of Library and Information science programme divided into four semesters.

Intake Capacity: The Intake Capacity of the department is 25 students.

Faculty Strength: There is no any permanent faculty in the department. The DLIS is run by one Adhoc and two contractual Assistant professor.

LIS Education in North Eastern Hill University (NEHU), Shillong:

North Eastern Hill University (NEHU) is a central university and was established in 1973. NEHU is the only university of the state of Meghalaya to promote higher education in the hill region and the second University in the North East India with LIS courses.

The DLIS was established in 1985 with a new approach to Library and Information science education in the country. In the country the department introduced for the first time, a two year integrated course leading to Master of Library and Information Science. In 2002 UGC has recommended the same pattern of education under model curriculum in Library and Information Science.

Courses offered:

1. MLISc - Two years duration (Four Semisters)

2. Ph.D - The Ph.D. Course was introduced in the year of 1990 with three to five years duration.

ICT Infrastructure: The department has a well equipped computer laboratory with internet facilities catering the need of the students and research scholars.

Faculty Strength: DLIS in North Eastern Hill University has three professors, one associated professor and two assistant professors.

Since 1986 more than 500 students have got MLISc Degree and about 30 research scholars have been awarded PhD Degree from the department

LIS Education in Manipur University

Manipur University was established on 05 June, 1980 under the Manipur University Act 1980 (Manipur Act 1980). It is a teaching cum affiliating university located in Imphal with territorial jurisdiction of the whole state of Manipur. The University was converted into a central University 13 oct, 2015, under the Manipur University Act 2005, passed by the Indian Parliament. Manipur University is the third University of the N.E. India which has strated library science training programme.

The DLIS was establishing on 2nd April, 1986, then University librarian professor M.R. Kumbhar was the head of the department. In the year of 1986 the Bachelor of Library and Information Science (BLISc.) Programme was started in response to meet the demand for training human resources in the field of LIS particularly for the state of Manipur. Again in 2004 the department introduced one year programme of Master of Library and Information Science (MLISc) with an intact of 06 students. The department introduced two years intrigrated MLISc course in 2006-07 academic session. The department started Ph.D programme from the year 1987.

Courses Offered

1. MLISc- The programme has two years duration and intact capacity 25.

2. Ph. D- The duration of Ph.D Programe is from 3-5 Years.

ICT Infrastructure: The DLIS has well furnished IT laboratory to meet the needs of academic and research programme.

Faculty Strangth: The department has two associate professor, two assistant professor and two guest faculties.

LIS Education in Mizoram University

Mizoram become an independent state in the year 1987. Due to high literacy percentage in the state it was nessasary to established a University. Mizoram University was established on 2nd July, 2001 by the Mizoram University Act of the parliament of India at Aizawl, the capital city of Mizoram. It is a central University. In the year 2002 Mizoram University introduced Bachelor of Library and Information (BLISc) course for one year duration. The university introduced one year Master of Library and Information (MLISc) programme in the year 2003.

It was in the year 2005 that the department (DLIS) started two year integrated MLISc programme and has continued since then.

Courses Offered

1. MLISc – The department introduced a two year integrated MLISc from the year 2005 with an intact capacity of twenty five students.

2. M.Phil-In the year 2007 the department introduced Mphil Programme in Library and Information Science with an intact capacity of 5 students. Mizoram University the only University of N.E. India to offer the Mphil programme for the first time.

3. Ph.D- The department introduced Ph. D programme in the LIS since 2005.

ICT Infrastructure: The DLIS has well equipped computer laboratory with internet facilities for the students and research scholars.

Faculty Strength: The department is being run by three professors, two associated professors and two assistant professors.

Twenty research scholars and thirty five Mphil students were awarded the degree from DLIS till 2018.

LIS Education in Tripura University

The Tripura University was founded on 2nd Oct. 1987 under Tripura University Act no. 117, 1987. Tripura University was converted in to a Central University under Tripura University Act. 2006 which come in to force on the 2nd July,2007. In the year 29th Feb. 2016 the department LIS was established with a few to furnished libraries in the region with skilled man power. The department is imparting one year Bachelor of Library and Information Science (BLIS) courses based on recommendation of UGC model curriculum in LIS. The department introduced one year Master of Library and Information Science (MLIS) come form the academic session

2017-18. To provide advanced knowledge and techniques to manage the modern libraries in today's digital era.

Courses Offered

1. BLIS – one year course with intact capacity of 20 students

2. MLIS – one year- two semester programme with intact of 20 students

Faculty Strength: The department has one associated professor, two assistant professor and two guest faculties.

In addition to the central and state government funded universities some private universities have been established in North East India which is imparting the LIS education e.g. Arunachal University at Arunachal, Royal University at Nagaland, University of Science and Technology, Meghalaya.

The Indira Gandhi National Open University(IGNOU), Open the regional center and some study centers in N.E.India. In 1984 Indira Gandhi National Open University, New Delhi introduced the BLIS programme. It has played important role in LIS education in N.E. India to conduct DLIS, MLIS, Ph.D. and PGDLAN programme.

Table 1: Name of the University of North East India Provide LIS education

SL No	Name of the University	Year of establishment	Year of establishment	Current program
1	Gauhati University	1948	1966	MLISc,M.Phil,Ph.D
2	Dibrugarh University	1965	2005	BLISc, MLISc
3	North Eastern Hill University	1973	1985	MLISc,Ph.D
4	Manipur University	1980	1986	MLISc, Ph.D
5	Tripura University	1987	2016	BLIS, MLIS
6	Assam University	1994	2009	MLISc, M.Phil,Ph.D
7	Mizoram University	2001	2002	MLISc,M.Phil,Ph.D
8	Assam Women's University	2013	2015	MLIS

Table 2: Faculty position of LIS department in North East India University and intake capacity

SL No	University	Professor	Associate Professor	Assistant Professor	Guest/Part time Prof	Intake capaciy
1	Gauhati University	3	Nil	3	Nil	MLISc-25 M.Phil-6 Ph.D-As per ordinance and statute
2	Dibrugarh University	Nil	Nil	Nil	4	BLISc-24 MLISc-20
3	North Eastern Hill University	3	1	2	Nil	MLISc-25 Ph.D As per ordinance and statute
4	Manipur University	Nil	2	2	2	MLISc-25 Ph.D- As per ordinance and statute
5	Tripura University	Nil	1	2	2	BLIS-20 MLIS-20
6	Assam University	1	1	2	Nil	MLISc-25 M.Phil-5 Ph.D- As per ordinance and statute
7	Mizoram University	3	2	2	Nil	MLISc-25 M.Phil-5 Ph.D- As per ordinance and statute
8	Assam Women's University	Nil	Nil	Nil	3	MLIS-25

Table 3: Infrastructure of DLIS of North East India University

SL No	University	Dept./Seminar Library	ICT Infrastructure	Teaching tools and Aids
1	Gauhati University	Yes	Yes	Yes
2	Dibrugarh University	Yes	Yes	Yes
3	North Eastern Hill University	Yes	Yes	Yes
4	Manipur University	Yes	Yes	Yes
5	Tripura University	Under process	No	No
6	Assam University	Yes	Yes	Yes
7	Mizoram University	Yes	Yes	Yes
8	Assam Women's University	Under process	No	No

1. Selection Procedure of Students for LIS Education

There is no uniform procedure adopted by the LIS department of N.E. University for selecting students. The selection is basically on the basis of merit in the qualifying examination, in the entrance test held by the department, as well as on the basis of interview.

2. Courses Offered

The North East India Universities the LIS Schools imparted the different courses. Ranganathan committee report enumerated the under mention courses in library science (CDC Report, 2001)

A. Certificate course
B. Diploma Course
C. PG Diploma Course e.g. PGDLAN, PGDM
D. Bachelor Degree Course e.g. BLISC
E. Master Degree Course e.g. MLISc
F. Doctorate Course e.g. M.Phil, Ph.D

Conclusion

Library and Information Science (LIS) education in N.E. India is now sixty six years of age. During the sixty six years have witness's transformations after transformation in teaching methodology curriculum content and other related aspect. Trends like digitization, globalization, internet, consortium etc has brought revolution in the discipline of LIS education. LIS school strength of North East India must increase and syllabus at all levels should be regularly updated and device in relation to information science. There should be a cooperation among the faculty members, professional staff in the department of LIS in the region. The LIS school of N.E. India should give important to providing quality education which includes library automation retrieval system, networking and other courses related to information technology. Sufficient financial recourses should be allotted to in service training, continuing education which is an essential part of man power development programme. The research organization, government should provided financial assistants to research scholars in LIS to increase the quality of research.

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8

Privatization of LIS Education in North East India: An Introduction

Nirmal Ranjan Mazumdar
Manashi Bharadwaj

Introduction:

Privatization is a process of transferring the authority from government to private agency, society or party. Privatization holds different policies and programs which bring a lot of change to the modern educational society, helping in the expansion of a subject as well as meeting the needs by establishing different colleges, universities, schools, *etc*. Privatization is not only helping the society by providing education but also it supporting individual in economic term also. In the case of educational society, the main motto of private institute is to provide quality education, promotion of technological advancement, meeting the education in international standards, *etc*. providing knowledge to the society fulfilling one's potential and it is also the key for mobility and economic growth. Privatization of LIS education in North East India is a very flourishing area. A pen picture of this area has been drawn in this paper.

LIS Education in India:

Libraries are the gateway to knowledge. It helps a society in acquiring knowledge which leads to growth and development. Library Science deals with educating the people to run a library in a scientific way. In India, the first such course in term of a training course was started at the central library Baroda in1911/1912 by Sayaji Rao Gaikwad III. He started a library science school at Baroda with the help of William Alenson Borden. Next

after these, Punjab University (Now in Pakistan) initiated the course in the year 1915 by A.D Dickinson. After the completion of glorious centenary of LIS Education India in 2011, a numerous library schools are being started by different universities and associations providing LIS courses as certificate courses in Library Science (CLibSc), Diploma in Library Science, Bachelor in Library and Information Science (BLibISc/BLISc), Master in Library and Information Science (MLibISc/MLISc), Post Graduate Diploma in Library Automation and Networking (PGDLAN) and research programme leading to MPhil, and PhD. Higher education in India is one of the largest and the fastest developing sector in the world. The LIS education in India is one of the most prosperous areas of higher education. As a part of higher education system, the LIS education in India is also growing faster and moving from the traditional system to the modern one. The Library and Information Science Education is a multidisciplinary in nature, extending to other subjects like computer application, management, statistics, laws, and many more. Till 2018, all total 128 Universities are providing LIS education in India in different capacities. Out of these 128, 19 are Central Universities, 72 are State Universities and the number of Private Universities is 37. (Indian Library Association.)

LIS Education in North East India:

LIS education in India begins in late 1960's. In North East India, Gauhati University initiated the Bachelor degree course as B.Lib.Sc in the year 1966 as evening course which was headed by the then University Librarian Sjt Jogeswar Sarma, later in 1979 one year master degree course was started as MLISc. The Department started functioning independently from 1st August 1983. Later in the year 1985 name of the department was renamed as Library and Information Science and started as a full time department. From the year 1987 the department introduced PhD program. From year 2001-2002, two year master degree programme started in the department with a fully revised syllabus. In 2016, the glorious Golden Jubilee Year of DLISc, GU has initiated the M Phil Course in regular mode. In Assam, apart from Gauhati University, Dibrugarh University started the Centre for Library and Information Science (CLISS) in year the 2005 to impart education in LIS. Later in 2007, one year BACHELOR/MLIS programme was also introduced. The first central university in the state, *i.e.* Assam University also initiated LIS courses from the year 2009. The

only women's university in North East India, *i.e.* Assam Women University, Jorhat has started the LIS course in 2015. The only state open university of NE India, *i.e.* KKHSOU has been providing Diploma in Library and Information Science since 2012. NEHU, situated in the capital city of Meghalaya, the first central university of NE India, started two year integrated Master Course in LIS in the year 1985. Later Manipur University, Mizoram University, Tripura University and Sikkim University are also offering different LIS degrees in regular mode. Now the private universities are also becoming a part and parcel of LIS education in India and NE India.

Privatization of LIS Education in North East India:

Privatization of higher education is a twenty first century phenomenon. Privatization of education refers to different educational programmes and policies, where the assets, activities, responsibilities of any government or public institution, organization are transferred. Education is the basic right to each and every individual which is powerful in achieving knowledge which finally leads to the development of a society. Everyone's first choice is to get their higher education in any government institute, but due to different circumstances they are unable to get their degrees. Thus to meet the demands of the student and as well as the rising demand of the concerned subject they got admitted to different private universities, colleges, *etc*. The experts and educationalists recognize it as an impact of globalization. Some educationalists advocate the privatization on the other hand, some are opposing it. But the truth is that in India, now the private institutions are playing a major role in higher education system. This trend of privatization has been started during 2000's. It becomes an indivisible part of higher education system in India. None can deny private Sector as a major player in higher education as some of the world-class higher educational intstitutions and universities of our country are running in the private sector. It is noteworthy that recognition from the UGC for these private universities is also being mandated.

In the race of privatization of higher education, this North Eastern part of the country is not lacking behind. In each and every North Eastern state, there is at least one private university. As per the UGC website, total 32 universities are recognized as private university. The state wise break up of such universities is:

Table 1: State wise distribution of Private Universities

Sl No	State	Number of Private University
1	Arunachal Pradesh	8
2	Assam	6
3	Manipur	1
4	Meghalaya	8
5	Mizoram	1
6	Nagaland	3
7	Sikkim	4
8	Tripura	1
Total		**32**

(Source: https://www.ugc.ac.in/privatuniversity.aspx)

The privatization of higher education, including LIS education in NE India is also a very interesting area of study and research, as a number of private universities are offering various LIS courses. In NE India, till 2018, 10 private universities are providing LIS education, which are located in 5 different states. It indicates the rising demand of LIS education in this area. These are:

Table 2: Private Universities in NE India providing LIS Education

Sl No	State	University	Year of Initiation	Website
1	Tripura	ICFAI University	2004	http://www.iutripura.edu.in/
2	Sikkim	Vinayaka Missions Sikkim University	2008	http://www.vmsuniversity.in
3	Meghalaya	CMJ University	2009	http://www.cmjumeghalaya.edu.in/
4	Meghalaya	USTM	2011	https://www.ustm.ac.in/
5	Arunachal Pradesh	University of Arunachal Studies	2012	http://www.arunachaluniversity.ac.in/
6	Arunachal Pradesh	Himalayan University	2013	https://www.himalayanuniversity.com
7	Arunachal Pradesh	Apex Professional University	2013	https://www.apexuniversity.edu.in
8	Arunachal Pradesh	Arunodaya University	2014	https://arunodayauniversity.ac.in/
9	Arunachal Pradesh	North East Frontier Technical University	2014	http://www.neftu.edu.in/neftu1/
10	Manipur	Sangai International University	2015	http://sangaiinternationaluniversity.com

(Source: https://www.ugc.ac.in privatuniversity.aspx)

The Table 2 reveals that ICFAI University, Tripura is the first private university in NE India which was established in 2004. It is noteworthy that the state university of Tripura *i.e.* Tripura University has started LIS education in 2013 only. The Sangai International University in Manipur is the latest one, which has been established in 2015. From the number of Universities point of view, Arunachal Pradesh has the highest 5 numbers of private Universities providing LIS education following Meghalaya with two universities. Some of the Department of Library and Information Science of these universities are running under some schools, Faculties, as college as per the regulations of their respective universities.

Table 3: DLISc of different Private Universities in NE India

Sl No	University	Under the Faculty of
1	ICFAI University	N. A.
2	Vinayaka Missions Sikkim University	College of Arts and Sciences
3	CMJ University	N. A.
4	USTM	School of Social Sciences and Humanities
5	University of Arunachal Studies	Faculty of Library and Information Science
6	Himalayan University	Faculty of Arts and Social Sciences
7	Apex Professional University	School of Library Science
8	Arunodaya University	N. A.
9	North East Frontier Technical University	Faculty of Science
10	Sangai International University	N. A.

(Source: Institutional/Official Website)

From the Table 3, it is found that out of 10 Departments, 6 are running under various schools and Faculties. It is to be noted that North East Frontier Technical University of Arunchal Pradesh is running under Faculty of Science. The DLISc of USTM and Himalayan University are running under Social Sciences School and Faculty.

Programmes Offered:

It is already mentioned that the LIS education in India is ranging from Certificate Level to the Ph D Level Course. The post-graduate courses are commonly known as M Lib I Sc and B Lib I Sc which nomenclature is also suggested by the UGC. Generally MLibISc or MLISc is a two-year integrated course. In some universities, one year B Lib I Sc/ BLISc and one year M Lib I Sc/ MLISc course provision is also there. DRTC, Bangaluru offers MS in LIS. Interestingly, University of Calcutta has started a three year Degree Course known as BA/BSc in LIS since 2017. The research level courses in India are M Phil and Ph D. Some universities provide diploma and post graduate diploma in this area. Besides certificate course, all these courses are recognized by the apex agency of higher education in India *i.e.* University Grants' Commission.

The private universities of NE India are also offering different degree programmes covering Diploma, Bachelor, Master as well as research programmes leads to M Phil and PhD level. The University wise courses are listed in the following Table.

Table 4: Private Universities and the Degree Offered

Sl No	University	Degree/ Course Offered
1	ICFAI University, Tripura	M Lib. I. Sc (Integrated)
2	Vinayaka Missions Sikkim University	B.Lib.I.Sc. (1 Year) M.Lib.I.Sc. (2 Years)
3	CMJ University	BLib, M Lib , M Phil, PhD
4	USTM	MLISc (Integrated), Ph D
5	University of Arunachal Studies	BLIS, MLIS, M Phil, PhD
6	Himalayan University	B Lib, MLib
7	Apex Professional University	B Lib, M Lib, PhD
8	Arunodaya University	BLIS, MLIS (One Year)
9	North East Frontier Technical University	D.LIB.I.SC, B.LIB.I.SC., M.LIB.I.SC, M Phil, Ph D
10	Sangai International University	MLISc

(Source: Institutional/Official Website)

From the above Table 4, it becomes clear that all these 10 private universities are providing master in Library and Information Science along with other courses.

Course wise break-up of the number of universities is listed in the following Table:

Table 5: Course wise break-up

Sl No	Course Offered	Number of University
1	D Lib. I. Sc/	1
2	B Lib. I. Sc/ BLIS/ BLISc	7
3	M Lib. I. Sc/ MLIS/ MLISc	10
4	M Phil	3
5	Ph D	5

(Source: Institutional/Official Website)

This Table 5 is a very interesting one. From this Table it is disclosed that only one university is offering Diploma and all the ten universities offer Masters in LIS. In case of Research study, three private universities in NE India are offering M Phil course, whereas five have the facility of PhD level research work. Seven out of ten universities have the Bachelor course in LIS.

Observation:

From the above discussion, Tables and their analysis, the following points are observed:

1. Near about 30% private universities in NE India has the provision of LIS education.

2. Though Assam has six private universities, none has started LIS education till this academic session 2018-19. In Mizoram also there is no private university with LIS education. It is noted that in Assam five universities are providing higher education in LIS where 4 are State universities and 1 is central universities. In Mizoram also, Mizoram University, a central university is offering LIS education.

3. It is to be mentioned that the only central university of Arunachal Pradesh, *i.e.* Rajib Gandhi University has no provision of LIS education till date, whereas in this state five private universities have the provision of LIS education ranging from diploma to PhD.

4. In Nagaland, one can get LIS education in the private sector, but it is in distance mode only. The Global Open University has both the Master and Bachelor Course in LIS.

Suggestion:

1. There should be uniformity in the Nomenclature of Degree provided.
2. A common Forum of Private Sectors' LIS School in NE India should be there for maintaining their uniformity and standard.
3. Students' exchange programme among all LIS schools, including Public (Govt.) and Private should be initiated.

Conclusion:

Privatization of higher education is the need of hours as the entire world is running faster. Without having private players in this area, a nation cannot develop in its fullest mode. For maintaining both the quality and quantity in Higher education, privatization is much more essential. It reduces the pressure on the Government as the private party takes the financial responsibilities. In the second largest country like India, planning of higher education without privatization is a very crucial one. In LIS education also privatization is required. But one thing is that it should not be a mushroom growing and money making machine system. The LIS education in NE India under private university has a bright future if all these universities maintain their quality in total.

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9

Development of Library and Information Science Education and Research in North Eastern Region of India: Issues and Challenges for Managing Quality Education and Research

Manoj Kumar Sinha

Introduction

North Eastern Region (N E Region) of India has attracted attention of the government of India since two decades for overall development of the region. The North Eastern States comprise of seven states which is popularly known as seven sisters and recently in 2001 the eight States "*Sikkim*' has been included in the North Eastern Region. These states are viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura.

In this paper an attempt has been taken to put the development of LIS education in North East India in terms of infrastructure, ICT infrastructure , faculty positions, courses offered , students intake capacity in UG, PG and Research Programme ; areas of research conducted in theses universities; Capacity Building Programme; faculty development and implementation of Career Advancement Scheme (CAS), number of M. Phil/ Ph.D. awarded, number of students qualified at the NET, employment and placement, alumni ; publication of research papers etc.

Status of LIS Education in North East India (Panigrahi, 2010, Sinha 2011)

Library and Information Science Courses offered by the Government Colleges and Universities of North East India

In North Eastern Region of India, altogether five Central Universities and four State Universities have been (one college each from Sikkim University and Tripura University) are offering courses in Library and Information Science which are ranging from Certificate Course to Course Work & M. Phil. / Ph.D. Level courses. These universities are Assam University, Silchar ;Gauhati University, Guwahati; Dibrugarh University, Dibrugarh ; Assam Women's University, Jorhat ; Manipur University, Imphal ; Mizoram University, Aizawl; ; North Eastern Hill University, Shillong ; Sikkim University, Gangtok (in college) ;Tripura University , Agartala(in University and College)and Maharaja Bir Bikram University , Agartala. The details of their establishment, types of courses offered, and other details are presented in Table- 1 and Table-2 (Sinha 2018).

In North Eastern Region of India, out of nineLIS Schools offering LIS courses, Assam State is having one Central University and three State Universities which are offering LIS courses at different level viz. DLISc, Guahati University, Guwahati; Centre of Library and Information Science Studies (CLISS),Dibrugarh;DLISc, Assam University, Silchar and Assam Women's University, Jorhat.

North Eastern Hill University (NEHU) has been established in the year 1985 and the DLISc has been established in the same year. Manipur University,Imphal was established in the year 1980 and it started LIS course in the year 1986. Mizoram University was established in 2001 and DLISc has been started in 2002. D.S. College under Sikkim University and Ram Thakur College under Tripura University introduced One Year Bachelor of Library and Information Science Course in 2004 and2010-11 respectively. In Rajeev Gandhi University, Itanagar ;Nagaland University, Kohima and Tezpur University,Tezpur , Library and Information Science Courses has not been started yet. (Sinha, 2011 C) (Table-1 and able-2). However they are looking for introducing LIS courses in their respective universities.

Recently Tripura University has introduced one year Bachelors and one year Masters Courses in Library and Information Science. From this year also, Tripura University has introduced Ph.D. Research Programme in the subject Library and Information Science. In the month of September -October 2018, C-RET has been organised to select the candidates for Course Work leading to the admission in Ph.D. Programme after successfully completing the course work examination.

Maharaja BirBikram University(State University) has been established by the Tripura Government in the year 2015and Bachelor and Master in Library and Information Science courses have been started since 2016 (Sinha, 2018).

Table-1: Profile of LIS Schools in N E Region (Sinha, 2018)

Name of University / Place	Year of Establishment of University	Type of University	Year of Establishment of LIS Department	Name of States where Universities are located	Name of HoD, Phone/ Mob and E-mail ID
Assam University , Silchar http://www.aus.ac.in	January 21, 1994	Central University	November 2009 Two Year MLIS course was started. Now renamed as M.Lib.I.Sc. Course.; M.Phil and Ph.D. Programmes offered	Assam	Prof. Manoj Kumar Sinha mksinha1965@gmail.com Phone: 03842-270807 9435231672 (M)
Gauhati University, Guwahati https://www.gauhati.ac.in/	1948	State University	1966 MLIS and Ph.D. Programmes offered	Assam	Prof. Sanjay Kumar Singh Mob: 09435040402 E-mail: sksgu1@gmail.com
Dibrugrarh University, Dibrugarh https://www.dibru.ac.in/	1960	State University	BLIS started in January , 2005 MLIS Started in 2007 (Course Duration = One Year for each Course)	Assam	Dr. Utpal Das , University Librarian Director I/C Mob: 09864687125 E-mail: utpalishaan@gmail.com
Assam Women's University, Jorhat http://www.awu.ac.in	2013	State University	2015 MLIS Course offered	Assam	Ms. NirmaliChakravorty HoD I/C
Manipur University, Imphal http://www.manipuruniv.ac.in	June 05, 1980	State University Converted to Central University on 13th October 2005	April2, 1986 MLIS, Ph.D. Programmes offered	Manipur	Prof. Th. Madhuri Devi

NEHU , Shillong https://www.nehu.ac.in	1985	Central University	1985 MLIS, Ph.D. Programmes offered	Meghalaya	Prof. Moses M Naga Phone No. 272 3141/ 272 3142 Fax: +91-364-2551311 E-mail : mosesmnaga@gmail.com
Mizoram University, Aizawl https://www.mzu.edu.in	2nd July 2001	Central University	2002 Initially BLIS and MLIS Courses were opened which merged into Two Year MLIS Course in 2005. MLIS, M. Phil. Ph.D. Programmes offered	Mizoram	Prof. S.N. Singh drsinghsn@yahoo.com **Phone:** (+91)9415618430(M) & (+91)8257045500(M)
Sikkim , University, Gangtok http://www.cus.ac.in	2006	Central University	2004 in D .S. College , Gangtok (Earlier it was with North Bengal University, Darjeeling, W.B)	Sikkim	Details Not Available
Tripura University, Agartala Address: Suryamani Nagar, Bikramnagar, Tripura 799022 http://www.tripurauniv.in/	2nd October 1987	It was established as State University in 1985 and now converted into Central University In 2016	2010-11 in Ram Thakur College 29th February 2016	Tripura	Dr. R.K. Mahapatra Mob: 09861033680 E-mail:
MBB University, Agartala www.mbbuniversity.ac.in	2015	State University	2016	Tripura	Dr. Sudip Bhattacharjee E-mail: sudipbest@gmail.com
Following Universities do not offer LIS Courses in University Department					
Rajiv Gandhi University, Itanagar University Road, Papum Pare, Arunachal Pradesh 791112 *https://www.rgu.ac.in*	4th February , 1984 Converted into Central University in 2005	Central University	No LIS Department and No Courses is being Offered	Arunachal Pradesh	
Tezpur University, Tezpur http://www.tezu.ernet.in	1994	Central University	No LIS Department and No Courses is being Offered	Assam	

Nagaland University, Kohima http://nagalanduniversity.ac.in	1994	Central University	No LIS Department and No Courses is being Offered	Nagaland	
Sikkim , University, Gangtok http://www.cus.ac.in	2006	Central University	2004 in D .S. College , Gangtok (Earlier it was with North Bengal University, Darjeeling, W.B)	Sikkim	

(Source: Web Sites of Different Universities of North East India, Sinha 2011 and by browsing through current web sites of the Universities)

Table-2: Courses Offered, Intake Capacity, Faculty Position, and M. Phil./ Ph. D. Awarded in North East India (Sinha ,2018)

Name of University / Place	Year of Establishment of University	Type of University	Year of Establishment of LIS Department	Name of States where Universities are located	Name of HoD, Phone/ Mob and E-mail ID
Assam University , Silchar http://www.aus.ac.in	January 21, 1994	Central University	November 2009 Two Year MLIS course was started. Now renamed as M.Lib.I.Sc. Course.; M.Phil and Ph.D. Programmes offered	Assam	Prof. Manoj Kumar Sinha mksinha1965@gmail.com Phone: 03842-270807 9435231672 (M)
Gauhati University, Guwahati https://www.gauhati.ac.in/	1948	State University	1966 MLIS and Ph.D. Programmes offered	Assam	Prof. Sanjay Kumar Singh Mob: 09435040402 E-mail: sksgu1@gmail.com
Dibrugrarh University, Dibrugarh https://www.dibru.ac.in/	1960	State University	BLIS started in January , 2005 MLIS Started in 2007 (Course Duration = One Year for each Course)	Assam	Dr. Utpal Das , University Librarian Director I/C Mob: 09864687125 E-mail: utpalishaan@gmail.com
Assam Women's University, Jorhat http://www.awu.ac.in	2013	State University	2015 MLIS Course offered	Assam	Ms. NirmaliChakravorty HoD I/C

Manipur University, Imphal http://www.manipuruniv.ac.in	June 05, 1980	State University Converted to Central University on 13th October 2005	April2, 1986 MLIS, Ph.D. Programmes offered	Manipur	Prof. Th. Madhuri Devi
NEHU , Shillong https://www.nehu.ac.in	1985	Central University	1985 MLIS, Ph.D. Programmes offered	Meghalaya	Prof. Moses M Naga Phone No. 272 3141/ 272 3142 Fax: +91-364-2551311 E-mail : mosesmnaga@gmail.com
Mizoram University, Aizawl https://www.mzu.edu.in	2nd July 2001	Central University	2002 Initially BLIS and MLIS Courses were opened which merged into Two Year MLIS Course in 2005. MLIS, M. Phil. Ph.D. Programmes offered	Mizoram	Prof. S.N. Singh drsinghsn@yahoo.com **Phone:** (+91)9415618430(M) & (+91)8257045500(M)
Sikkim , University, Gangtok http://www.cus.ac.in	2006	Central University	2004 in D .S. College , Gangtok (Earlier it was with North Bengal University, Darjeeling, W.B)	Sikkim	Details Not Available
Tripura University, Agartala Address: Suryamani Nagar, Bikramnagar, Tripura 799022 http://www.tripurauniv.in/	2nd October 1987	It was established as State University in 1985 and now converted into Central University In 2016	2010-11 in Ram Thakur College 29th February 2016	Tripura	Dr. R.K. Mahapatra Mob: 09861033680 E-mail:
MBB University, Agartala www.mbbuniversity.ac.in	2015	State University	2016	Tripura	Dr. Sudip Bhattacharjee E-mail: sudipbest@gmail.com

Following Universities do not offer LIS Courses in University Department					
Rajiv Gandhi University, Itanagar University Road, Papum Pare, Arunachal Pradesh 791112 *https://www.rgu.ac.in*	4th February , 1984 Converted into Central University in 2005	Central University	No LIS Department and No Courses is being Offered	Arunachal Pradesh	
Tezpur University, Tezpur http://www.tezu.ernet.in	1994	Central University	No LIS Department and No Courses is being Offered	Assam	
Nagaland University, Kohima http://nagalanduniversity.ac.in	1994	Central University	No LIS Department and No Courses is being Offered	Nagaland	
Sikkim , University, Gangtok http://www.cus.ac.in	2006	Central University	2004 in D .S. College , Gangtok (Earlier it was with North Bengal University, Darjeeling, W.B)	Sikkim	

(Sources: Latest Web Sites of the Universities)

Establishment of Library and Information Science Department in PrivateUniversities of North East India

If we look into the scenario of the establishment of Private Universities in North East India, it has been observed that a good number of Private Universities are coming up and they also started Bachelors' and Masters' courses in Library and Information Science. In near future, they may also introduce research programmes in their respective universities. The details of few Private Universities which have been established in North Eastern Region of India are given in Table -2 and Table-3.

Table-3 : Status of LIS Education in Private Universities of North East India

Name of University / Place	Year of Establishment of University	Type of University	Year of Establishment of LIS Department	Name of States where Universities located
ICFAI University . Agartala, Tripura Agartala-Simna Road, P.O. Kamalghat, Mohanpur, Agartala, Tripura 799210 Phone: 0381 286 5752 *https://www.iutripura.edu.in*	2015	Private University	2016	Tripura
University of Science and Technology, Meghalaya (USTM) Kiling Road, 9th Mile, G.S Road ,Ribhoi, Baridua, Meghalaya 793101 http://www.ustm.ac.in	2011	Private University	2011	Meghalaya

(Source : Sinha ,2018)

Brief Profile of the Department of Library and Information Science in North East Universities

Gauhati University, Guwahati (https://www.gauhati.ac.in/ **)**

The Department of Library and Information Science, Gauhati University is the first post graduate and premier department of library and information science in the entire North-East India established in 1966 as evening programme with the founder Librarian of Gauhati University, Dr. JogeswarSarma as Head-in-charge leading to Bachelor of Library Science (B.Lib.Sc.) degree. In the year 1979, one year Master of Library Science (M.Lib.Sc.) programme was introduced. In 1983, both B.Lib.Sc. and M.Lib.Sc. programmes become one year full time day programme, and in the year 1985 as per the UGC guideline, the programme was restructured as Bachelor of Library and Information Science (B.L.I.Sc.) & Master of Library and Information Science (M.L.I.Sc.) programme with some changes in the syllabus.

Since 1987 the Ph.D. programme has also been introduced in the Department. From the academic session 2001-02, as per UGC guidelines two years integrated M.L.I.Sc. programme with four semester has been

introduced in place of earlier one-year B.L.I.Sc and M.L.I.Scprogramme. Keeping in mind about the changing trend of the society, the programmes were again revised from the 2007-08 academic session. This time more importance was given to the use of IT in libraries. In the year 2013-14 new revised syllabus with Credit and Grading system was introduced. Again in the year 2016, the department launched M.Phil. programme and in the year 2017 the M.L.I.Sc. and M.Phil. / Ph.D. syllabus was revised.

The endeavour of the department has been always to enrich, strengthen and support the students to give them opportunities and platform to learn and develop a mind of their own. The department is sure that many of our students would become strong tress of tomorrow and oxygenate the society by supporting the teaching and learning of the education system. The department invite all of you to join us and become a part of the rewarding and challenging profession of librarianship (https://www.gauhati.ac.in/arts/library-and-information-science).

At present the Department of Library and Information Science of GauhatiUnivesity is having three Professors viz., Prof. Narendra Lahkar; Prof. Rajani Kant Barman and Prof. sanjay Kumar Singh and three Assistant Professors viz., Dr. Badan Barman, Dr. DepenDeka and Dr. Tilak Hazarika.Prior to this Dr. JogeswarSarma , Founder Head of the Department ; Prof. AlakaBuragohain and Prof. N. N. Sharma served the department and produced many B. Lib. Inf. Sc. , M. Lib. Inf. Sc. Students and Ph. D. scholars.

Many students have qualified at the NET and more than 60 Ph.D. research scholars have been awarded Ph. D. degree under the supervision of eminent Professor of the Dept. of Library and Information Science, Guahati University, Guwahati since 1987. Many more research scholars are working under the guidance of the eminent Professors of the Department.

Placement

The Department of Library and Information Science, Gauhati University is one for the foremost and prestigious department in India that produces the dynamic administrator who leads the knowledge resource centres and libraries of many institute / organization in the entire North-East India and beyond. Almost all the alumni of the department hold very good and respectable position in many institutes.

Almost all the College Librarians of Assam, and some college librarians of neighboring states are alumni of this department. Students have also found placement in Central Universities, State Universities, Indian Institute of Technology, Railway, All India Radio, Doordarshan Kendra, Botanical Survey of India. Archeological Survey of India, National Institute of Rural Development and Panchayati Raj, Department of Historical and Antiquarian Studies, National Library (Kolkata), Public library in India, Omeo Kumar Das Institute of Social Change and Development, Institute of Advanced Study in Science and Technology, Indian Institute of Bank Management, State Institute of Panchayat & Rural Development, Media Channels, Private educational institutions, and so on. At present many faculty members of the Dept. are alumni of the Gauhati University and successfully contributing towards the development of LIS education and research in Assam in particular , North East and rest of India in general.

Dibrugarh University, Dibrugarh (http://dibru.ac.in**)**

Library and Information Science Course offered by Dibrugarh University through its Centre of Studies in Library and Information Science (http:// dibru.ac.in/ page.php ? cat = Centre&id = Library % 20and % 20Information %2 0Science % 20Studies) :

Profile of the Department

The Centre for Library and Information Science Studies (CLISS), Dibrugarh University was established in January 2005 with a view to impart education and practical training in Library and Information services. A one-year BLIS programme also introduced with intake of 24 (20+4 endowment) students. In 2007, one-year (two semester) MLIS programme was introduced with intake of 20 (15+2 endowment+3 deputation) students.Since the North Eastern states are lagging far behind in respect of Library and Information services in comparison with other parts of the country, it is expected that the CLISS will be able to overcome this situation by developing the required trained manpower.

Most of the academic libraries are staffed by one Librarian having Library Science degree and one or two attendants without library science training. Even libraries attached with the Research organizations are under-staffed and most of the Sub-divisional libraries are also run by untrained

librarians due to dearth of trained personal. Hundreds of Secondary and Higher Secondary schools and Junior College Libraries run without Librarians. The CLISS is expected to definitely fulfill the need of the entire region. The centre has very good output till now and almost all of the outgoing students of the centre have successfully managed to get a job in different institutions, both government and private; in different parts of the country.

Aims and objectives of the CLISS

The basic aim of the CLISS is to develop manpower by imparting both theoretical and practical knowledge in Library and Information Science. It is intended to develop skills and techniques among the students for offering effective and efficient Library and Information Services in their future professional life.

The main objectives of CLISS are:

* To have the basic understanding about the role of Library and Information Centres in modern educational and social milieu.
* To train students on the principles of methods and techniques of organizations and management of modern library and information centre.
* To acquaint students with important information sources and services in different disciplines and service sectors.
* To train students in application of information technology in information collection, processing, storage and retrieval.

Course and Programmes

The CLISS offered following two courses :

* *Undergraduate Courses:* ***Bachelor in Library and Information Science (B.L. I.Sc.)***
* *Postgraduate Course:* ***Master of Library and Information Science (M.L.I.Sc.)***

Assam University, Silchar (http://www.aus.ac.in**)**

Assam University is a Central University established by an Act XIII of 1989 of the Parliament and came into existence in the 1994. It has two campuses viz., Assam University Main Campus in Silchar and its satellite

campus in Diphu of KarbiAnglong Districts. It has 16 schools of study and 36 Dept. in Main Campus and 10 Dept and few Study Centres in Diphu Campus.

The Department of Library Science has been established in the year 2009. The Masters of Library and Information Science programme at Assam University, Silchar educates students in the principles, practices, and ethics of library and information science, imbues them with a sense of service to diverse populations, and prepares them to be lifelong learners and active leaders in a rapidly changing information and knowledge society.

The Department of Library Science of Assam University is committed to the University's mission of teaching, learning, research and community services. As a professional department, it will be the department of choice of Assam in general and Barak Valley in particular, which will educate its students, in both theory and practice, to identify, acquire, organize and disseminate information. By integrating technology across the curriculum, the department will impart the knowledge and skills of the profession in preserving and providing access to the records of our cultural heritage and the documents of scholarly research. By nurturing research, innovation, and service, the department will strive to offer high-quality student-centered programmes necessary to prepare library and information professionals in the knowledge society of the 21st century.

The Department of Library Science would be recognized both nationally and internationally as a leader in producing information professionals. The department would be noted for its production of trained and professionally qualified librarians and other information professionals who are motivated by leadership and service. Those LIS Professionals would be knowledgeable and ethical in their professional practice. While recognizing the rich cultural and technological heritage of their fields, they will be prepared to make themselves adoptable in changing the environment and also would be lifelong learners.

Department of Library Science was established by Assam University in 2009. But recently it has been renamed as the Department of Library and Information Science. The department has introduced MLIS course in the year 2010-11 Session. This is a PG full-time day course of two-year duration comprising of four semesters with intake capacity of 25 students. This department was initially started under School of Information Science, Assam University, Silchar which was headed by Prof. G.P. Pandey of Dept.

of Mass Communication. This department has been placed under separate School of Studies named as Swami Vivekananda School of Library Sciences. Prof. SajalNag ,Dept of History and Prof. SumanashDutta, Department of Economics were two Deans of School and at present new Dean of School , Prof. Manoj Kumar Sinha has been appointed w.e.f March 8, 2018.

Research & Development Activities

Research Proposal for commencing research programme leading to M. Phil. and Ph.D. Programme has been submitted through the BPGS and School Board to the Academic Council for approval. The syllabus for IPP Coursework has been framed and submitted to the Academic Council through BPGS and School Board for its approval.

Since 2013, research programme for M. Phil and Ph.D. degree have been introduced. First IPP Admission Test was conducted in January 2013 and first batch of 26 students have taken admission in IPP Course Work. During 2013-14 , 12 Ph.D. research scholar and 07 M.Phil research Scholars have been working under two supervisors viz., Dr. Manoj Kumar Sinha (6 Ph.D. and 02 M. Phil.) and Dr. MukutSarmah(6 Ph.D. and 05 M. Phil.) have been provisionally registered w. e. f 9th September 2013. Second batch of 05 students have taken admission in IPP Course Work in January, 2014.

Now each year the Course Work EntranceExamination, Combined Research Eligibility Test (C-RET) is being conducted and research scholars are selected on the basis of their performance in the Entrance Examination. The Intake capacity of the candidates for admission into course work depends on the availability of seats and entitlement of the teachers for taking research students as per the UGC Regulations 2016.

Altogether 13 number of Ph.D. research scholars and 12 number of M. Phil scholars have been awarded Ph.D. and M.Phil. degree respectively. During the current session 04 number of M. Phil. and 12 number of Ph.D. scholars have been working under the supervision of Prof. Manoj Kumar Sinha (02 M. Phil and 08 Ph. D.) Dr. MukutSarmah (01 M.Phil. , 02 Ph.D.) and Dr. NabinChandra Dey(01 M. Phil. and 02 Ph.D.). Till date 13 number of Ph. D. and 12 number of M. Phil. degree have been awarded under the Supervision of Prof. Manoj Kumar Sinha (07 M.Phil. and 07 Ph.D.) and Dr. MukutSarmah (05 M.Phil. and 05 Ph.D.) .

The Department has been conducting research in many areas like Academic Library System; Public Library System; Agricultural Library System; Information Literacy , Information Seeking Behaviour, Bibliometric Studies , E-Resource Management , Consortia , University Library System; E-Learning / Blended Learning , Management of College Libraries and Services, Best Practices, Green Library , Emerging Technology Application in Library, Collection Development , ICT Application , Library Automation and Networking , Digital Library, Institutional Repositories, Women's Librarianship, Media Libraries etc.

The Department faculty members are actively engaged in academic and research activity. Faculty members have published a number of research papers in Conference Proceedings, Edited Books, National and International Journals. Prof. Manoj Kumar Sinha has published more than 300 papers. Dr. MukutSarmah and Dr. Nabin Chandra Dey have also published many papers in journals, conference proceedings and edited books.

Faculty members are extensively using Social Media to reach the scholars and communicate with the LIS professionals , Faculty members , Research Scholars and students for teaching learning and research.

Staff Strength

There are four regular faculty members have been appointed. Two Guest Faculty members have been appointed for the period on one year only. Besides that many other eminent professors of Library and Information Science of India have been invited as visiting professors. At present Prof. Manoj Kumar Sinha, Professor, DLISc, Assam University has been working as Head of the Department since December 2009. Recently after his promotion from the post of Associate Professor to Professor, Prof. Manoj Kumar Sinha has been appointed as the Dean of Swami Vivekananda School of Library Sciences w. e. f. March 8, 2018.

Following are the details of the staff working in the department on Regular and as Guest Faculty . They are Prof. Manoj Kumar Sinha, , Dean , SVSLSc&HoD, ; Dr. MukutSarmah, Associate Professor , Sri Nabin Chandra Dey , Assistant Professor(Stage-II) and Sri Rajesh RangappaAldarthi , Assistant Professor. The department has been supported by two supporting staff . The Dept appointed two Guest Faculty SriSudip Bhattacharjee and Ms. Chanda Paul for a period of almost one year. Details are available in following Table4

Table-4 : Details of Faculty Members Appointed at the Dept of Library and Information Science, Assam University,

Name & Qualification	Designation	Area of Specialization/ Interests	Contact & Email ID
Manoj Kumar Singha (M. Sc., MLISc, B.Ed PGDHE, Ph.D. (Double) (Zoology and Lib. Sci.))	Professor	Academic Library System , Public Library System, Library, Information, Communication & Society , Knowledge Organization (Library Cataloguing (Theory & Practice) Management of E-Resource, Human Resource Management, Information & Communication Technology Application in Library, Library Automation and Networking, Digital Library; User Study / User Survey, Internet Literacy, Information Seeking Behaviour; Research Methodology , Indigenous Knowledge System.	mksinha1965@gmail.com 09435231672
MukutSarmah (MLISc, Ph.D.)	Associate Professor	Knowledge Organisation, Library Classification (Theory and Practice), Reference Sources and Services, Indexing, Information Storage and Retrieval, Information Needs, ICT Applications in Academic Library, Web 2.0 Applications, Digital Library, Bibliometrics, and LIS Research	
Nabin Chandra Dey (MLISc, MBA, PGDCA), Ph.D.	Assistant Professor	IT Applications in LIS, Human Resource Management, Statistical Techniques.	
Rajesh RangappaAldarthiMLISc, (NET-JRF)	Assistant Professor	Library Automation (Theory and Practice), Management of Library and Information Centers, Web application in LIS, Web Design, Content Management, Digital Library, Webometrics and Knowledge Organization: Cataloging (Theory and Practice)	rajesh.rangappa.aldarthi@aus.ac.in 9435415465

Head of Department :Prof. Manoj Kumar Sinha

Altogether more than 20 nos. of the MLIS passed students of departments have cleared NET for Lectureship and three students have qualified for JRF also. Faculty members of the department are actively engaged in academic and research work and have been contributed papers regularly to journals and conference proceedings. They are also attending workshops, seminars and conferences regularly and also delivered invited lectures in the seminar and conferences. This year also two number of our students have cleared NET.

The passed out students of the Departments are working as College Librarian, Assistant Professor in the Library and information Science, KVS,

NVS, many institutions, Teachers in Schools and Librarian in Private Universities, Colleges and Institutions.

Assam Women's University, Jorhat (http://www.awu.ac.in**)**

The Assam Women's University has been established by an act XXII of 2013 of State Legislature of Assam as a State University vide Notification LGL. 149/2011/92 dated 21.08.2013 and is empowered to award degrees as specified by the UGC under section 22 of the UGC Act 1956 through its own departments.The mission of the University is to provide a level playing ground for the women of Assam with respect to accessing higher education for promoting their knowledge, competitiveness and skills so as to make them capable citizens to fill up the women talent gap in different spheres of societal, scientific, technological and other areas.The ultimate goal of the University is to produce 21st century women knowledge and think tanks to effectively carry forward the women centric opportunities in the state of Assam and to become a matching partner in national and global development of the women centric activities.

Department of Library and Information Science

The Department of Library and Information Science was established in the year 2015, under the School of Engineering and Technology, with a view to equip the libraries with trained manpower.

4.411 Objectives of the Programme

* To familiarize students with basic concepts of information and its communication in society

* To introduce modern management techniques to students to manage Libraries and Information Centers effectively

* To develop skills in using computer and communication technology

* To acquaint students with the activities and services of different information systems and introduce the repackaging and consolidation techniques

* To make the students learn advanced information processing techniques and develop capability in retrieving information by applying different search techniques

* To assist students in identifying and learning the major issues in the development of new technologies in the libraries

* To introduce the different methods and techniques of research

The University offers full time two years (Four Semester) MLIS Course and Intake Capacity is 25. Three faculty members have joined the Dept out of which,one Asst Professor (on Ad-hoc) and two Asst Professor (on Contractual Basis) have been appointed. This University has been exclusively established for Women's of the North Eastern Region especially of Assam. The Course is of 80 credits (20 credits per semester).

There are four faculty members. Two are on Ad-hoc basis and two are on Contractual basis.

LIS Education in Manipur (Manipur University, Imphal) (http://www.manipuruniv.ac.in**)**

Manipur University was established on 5 June 1980 at the old historic Langthabal Palace of Canchipur, Imphal, the capital city of Manipur. It was converted into a Central University on 13 October 2005. It is the only University in the state which has library science training programme. The Department of Library and Information Science was established on 2 April 1986 and startedoffering one-year PG programme in BLIS in response to the demand for training human resources in the field particularly for the state of Manipur. Intake was limited to 40. Subsequently, MLIS was introduced in 2004 with an intake of 6. Since academic session 2006-07, these two have been replaced by a two-year integrated MLIS programme with 20 seats with the provision for 5 seats against lateral entry at the 3rdSemester25. In addition, it has introduced PhD programme since 1987.

The Dept of Library and Information Science , Manipur University is having two Professors Viz', Prof. Th. Madhuri Devi and Prof. Purnima Devi ; four Assistant Professor viz., DrChIbohal Singh, Dr. Bobby Phuritsabam and Dr.KeishamSangeeta Devi. Altogether currently 12 research scholars are working for Ph.D. degree. Their area of interests is Public Library System, Open Access Initiatives, Social Networking Sites, Knowledge Commission, Information Seeking Behaviors, Information Literacy, College Library Services, Use of E-Resources etc.

Head of the Department: Prof. Th.Madhuri Devi

LIS Education in Meghalaya : NEHU (https://www.nehu.ac.in**)**

Meghalaya was created as an autonomous state within the state of Assam on 2nd April 1970 and got full-fledged statehood on 21 January

1972. The Northeastern Hill University is the only University of the state to promote higher education in this hill region. The Department of LIS was established in 1985 with a new approach to Library and Information Science educationin the country. The Department introduced for the first time in the country a two-year integrated programme leading to MLIS. The same pattern of education has now been recommended by the UGC under Model Curriculum in Library & Information Science in 2002. The University Library is being used as a laboratory for the students for practical training under the guidance of faculty members and practicing librarians. Thus, theory and practice are given equal emphasis through this integrated approach.

The thrust areas of research are: Information Storage and Retrieval, Information Management, Users Needs and their Information Seeking Behaviour, Computer Applications and Information Technology, Digital Libraries, Knowledge: Structure and Development, Measurement & Effectiveness of Information Services, utilization of Information Resources both in Urban and Rural Settings of North East India.

The Department has been regularly revising and updating the syllabus keeping pace with the rapid developments of information technology (IT) and its crucial role in the library and information profession. The last revision of the syllabus was made in 2003. Partial revision and introduction of two new papers was made in 2008. Since 1986 more than 500 students have already got MLISc Degree from the Department and about 15 students have been awarded the Ph.D. Degree. Many of the students passed out from this Department are well placed and working in many senior professional positions in the university libraries as the University Librarians, College Libraries, State Libraries, R&D Institutes, Private sectors, Lecturers in the University, IIM, etc.

The Department continuously undertakes the task of improving the professional competence of the library and information personnel of the region in particular. This has been achieved through seminars, workshops and refresher courses conducted from time to time by the Department.The department is offering the following courses:

MLISc - Masters in Library and Information Science, and Ph.Dprogrammes. There are 25 seats of which 20 seats are reserved for the students from Meghalaya (https://nehu.ac.in/department/11/Library-Information-Science-department).

The Department is having two Professors and four Assistant Professors. They are Prof. Moses M.Naga; Prof. BikikaLaoo; Dr. P.Hangsing ; Dr.S.Ravikumar and Mrs.JiarlimonKhongtim and Mrs.J JThabah. They have been dedicated in teaching and research. They have produced a good number of Ph.D. theses. They are actively engaged in research on Information Seeking Behaviour, Public Library System, Community Development Programme and Role of Library; Indigenous Knowledge System; Bibliometric, Information Literacy, Users Study and many more. Altogether more than 15 number of Ph.D. theses and more than thousand MLIS dissertations and Library Reports have been produced in the Department.

Head of the Department: Professor Moses M Naga

LIS Education in Mizoram (Mizoram University, Aizawl)
(https://www.mzu.edu.in**)**

Mizoram is a new name given to the mountainous region earlier known as the Lushai hills, a district of Assam. In 1972 it became a Union Territory. In 1987, it got full-fledged statehood. Soon after this, Mizoram witnessed revolution in library activities. These include establishment and development of number of libraries. Due to high literacy rate and reading habits of the masses, the libraries are constantly getting recognition from all walks of life. Since its inception, Mizoram University introduced BLlSc in 2002. In 2003, MLIS of one-year duration was introduced29. However, these two courses have been replaced by two-year integrated MLlSc since July 2005. The Department has also introduced PhD since 2005. In 2007, M Phil was introduced which is the first of its kind in NE states.

A Brief Introduction of the Department
(https://www.mzu.edu.in/index.php/academics/2013-09-19-20-59-55/lib-science

The Department of Library & Information Science with a view to equip the libraries with technical manpower in the State was established during the academic session 2002-2003. Prof. A K Sharma, Ex Vice-Chancellor formally inaugurated the Department on 20th August, 2002 at the Central Library of Mizoram University. The Department offered one year BLIS Course in 2002 followed by one year MLIS course in 2003. It is only 2004 when two new faculty members (Professor-1, Lecturer-1) joined

the Department and took initiatives to combine both the courses with integrated MLIS Course of two years duration which was offered from 2005 academic session.

The same year the Department also extended Ph. D. Program in Library & Information Science. Two more faculty members (Reader-1, & Lecturer-1) joined in 2005. The Department further took initiative to commence M. Phil. Programme in 2007 which was the first course not only in Mizoram University but in the North East Region as well.

The integrated MLIS Course was revised and implemented with effect from the academic session 2011-12. It was revised in 2012-13 and adopted Choice Based Credit System as per the UGC instructions. The MLIS syllabus was further revised in 2015 as per the guidelines of UGC. The latest syllabus is also available on web site. The M.Phil and Ph.D course work syllabus was also revised in 2017 as per the latest guidelines of the UGC and credit system was adopted.

Right from the 2004 till date the Department organized a number of continuing education programmes like Seminars/Conferences/Workshops/ Training Programmes, Refresher Courses so as to provide professional exposure and competency development not only for the benefit of Mizoram Library & Information Professionals but also at the Regional and National level.

To trace a brief genealogy, the Department was functioning in a small rented building located in Chanmari in 2002 & 2003. It was only 2004, the Department was shifted to another rented building in Ramhlun Road which was comparatively more spacious than the old building. The Department moved to its own campus located at Tanhril in 2008 and started functioning till 2012 temporarily in School of Social Sciences. Now, it is functioning in its own two storeyed building.

Right from the beginning, it was a great challenge to the Department to start an up-to-date and need based MLIS course, developing other infrastructure like Computer Laboratory, Department Library, and Learning Resources and strengthen with more Teaching and Non-teaching Staff. It was only in 2010, two more Lecturers joined the Department and as on date it has full strength with eight faculty members. As of now i.e, 2017, the Department is equipped with 8 faculties (Professor-4 and Asst. Professor-4), 1- Technical Assistant. The other staffs of the Dept. include 1- LDC, and 1- Peon.

Aim/Objective/Vision: Mission of the Department:

The mission of the Department include:

* Providing quality based education to develop strength to compete national and international field

* Providing meaningful education to meet the current demands of the library

* Developing skill and competencies among the students so as to prove them a productive asset in the library

* Building library skills and information literacy.

Vision

The vision of the Department rests on the principle of developing knowledge based society so as to make a free flow of information and access to it by all communities in the region. Perpetrated with the mission, the Department commits to excellence in service which substantially meets the objectives of the various colleges and university libraries and promotes lifelong learning. The vision also includes:

* Providing adequate and sustainable educational strength to meet the changing needs of the society

* Developing leadership quality in managing the libraries and providing quality based services for sustainable education and research.

* Equipping the students to meet the 21st century workforce for libraries and academia

* Strengthening information literacy among the students

* Encouraging lifelong learning, continuous improvement and research.

Objectives of the Department of Library and Information Science

The aim and objective of the Department is to equip the libraries with technical manpower for effective services to the user communities. The objectives of Library and Information Science course are to:

* Provide students an understanding of the basic principles and fundamental laws of library and information science and enable them to understand and appreciate the functions and purposes of the libraries in the changing social and academic set-up of North East, India.

* Train the students in the techniques of modern methods in librarianship and management of libraries.

* Acquaint the students with the structure and development of the Universe of Knowledge and Research Methods.

* Make the students proficient in advanced techniques of Classification, Cataloguing and Documentation, and

* Develop specialized knowledge and skills in respect of organization and management of different kinds of libraries and reading materials.

Research Areas/ Overviews

The research areas undertaken by the faculties of the Department include,

Bibliometrics, Scientometrics, ICT in Library and Information Services, Knowledge Management in Libraries, Use of Library resources, Information Needs and Seeking Behaviour, Library Cataloguing, Academic Library System, Public Library System, Inf. Systems and Networks, Web Learning, ICT Application in Libraries, Webometrics, Digital Library, Information Technology, Information Literacy

Important Information

The Department is running 2 years integrated course in MLI Science with an intake of 25 students, M.Phil with an intake capacity of 5 and 1 (in-service) candidates and Ph.D.

The Department conducts Curriculum Stipulated Study Tour in 3rd Semester to keep the students abreast with the lively situation prevailing in advanced/ special libraries, university libraries, information centers etc. in the metropolitan cities in India.

There are Seven Faculty Members. Out of which three faculty members are Professor viz., Prof. PravakarRath, Prof. R.K.Nugrintinkhuma and Prof. S.N. Singh. Recently Professor R. N. Mishra has retired from the post of Professor &HoD. There are four Assistant Professor Viz. Dr. Manoj Kumar Verma, Dr. Akhandanada Shukla , Dr. Amit Kumar and Dr. Lalngaizuali.

Head of the Department : Professor S.N.Singh

LIS Education in Sikkim

DS College, Gangtok, started BLIS in 2004. Earlier this college was affiliated the North Bengal University, West Bengal. But with the establishment of the Sikkim University, the College was automatically affiliated to Sikkim University, which is a Central University.

LIS Education in Tripura (http://www.tripurauniv.in/ **)**

Tripura was integrated with Indian Union in October 1949 and became a Union Territory in November 1956. In 1972 it was elevated to the status of a full-fledged state. A full-fledged University namely Tripura University started functioning in 1987. The University has recently started (2010-11 sessions) a BLIS course in Ramthakur College, one of its affiliate. Total intake capacity is limited to 30. Minimum qualification is graduation with honours in any discipline

The Department of Library and Information Science was established in the year 2016 on 29.02.2016 with a view to furnish the libraries in the region with vivid and skilled manpower. The department is imparting one year truncated post graduate diploma program leading to degree of Bachelor of Library and Information Science (BLIS) based on the recommendation by UGC model curriculum in LIS. The department also started 1 year Master of Library and Information Science(MLIS) course from the academic session 2017-2018 to provide advanced knowledge on the subject and equipped students with the techniques of managing modern libraries in the digital era. The need for the skilled library professionals having degree in LIS with technical knowledge is inevitable in any library in this digital era. The course is prepared, keeping in mind the current scenario of higher education in the field of LIS in India. The Department is working to produce well equipped manpower by offering strong theoretical foundation as well as hands on practical classes, seminars, presentation, study tour, and internship program (http://www.tripurauniv.in/index.php/departments?id=406).

At present the department has appointed three regular faculty Viz. Dr. R.K. Mahapatra , Associate Professor , Miss. Mithu Anjali Gayan and Mr. Augustine Zimik.

Head of the Department : Dr. R.K. Mahapatra

MBB University (www.mbbuniversity.ac.in**)**

The Department of Library and Information Science was established in the year 2016. At present the department offers one year Bachelor Degree in Library and Information Science. The University has a plan to introduce one year Master Degree program in Library and Information Science very soon. Presently, intake capacity of the department is fifty.

The principal focus area of the Department is to train the students in generating knowledge in automated and digital library system and to equip them with knowledge to handle with modern library and information tools.

All the courses have been designed according to UGC CBCS (*Credit based Choice System*) model and have a lot of potential in research fields. This will essentially help a research aspirant to build his/ her research career. The Department regularly organizes departmental seminars, conference etc. Students are also encouraged toinvolvethem in practices of various library related work by visiting/ working in different libraries (http://www.mbbuniversity.ac.in/ department_of_library_and_Information_science) .

Dr. Sudip Bhattacharjee is at present heading the Dept as HoD I/ C. The Dept may be contacted at mbbu_dlisc@gmail.com

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Nagaland University, Lumami **(**http://nagalanduniversity.ac.in/English **)**

Nagaland University is a Central University established in the state of Nagaland by an Act of Parliament by the Government of India in 1989. It's headquarter is located at Lumami, Zunheboto. Two other permanent campuses are at Kohima and Medziphema. Also there is a temporary campus in Dimapur where B.Tech courses are offered.

Till date Department of Library and Information Science has not been established.

Tezpur University, Tezpur (http://www.tezu.ernet.in **)**

Tezpur University was established by an Act of Parliament in 1994. The objects of this Central University as envisaged in the statutes are that it shall strive to offer employment oriented and interdisciplinary courses to meet the local and regional aspirations and the development needs of the state of Assam and also offer courses and promote research in areas which are of special and direct relevance to the region and in emerging areas in

Science and Technology.Tezpur University has been planning to establish the Deptof Library and Information Science. The proposal was prepared and it is under consideration of the Tezpur University authority to launch this department to offer courses in Library and Information Science at Bachelors/ Masters Level.

Private Universities offering Library and Information Science Courses in North East India

University of Science and Technology, Meghalaya (USTM)
(http://www.ustm.ac.in **)**

The University of Science and Technology, Meghalaya (USTM) has been established under the provisions of University of Science and Technology, Meghalaya Act (No.6 of 2008) enacted by the Legislative Assembly of Meghalaya and notified vide Gazette Notification No. LL(B)87/ 2008/21, dated 02.12.2008 of Government of Meghalaya. The University is empowered by University Grants Commission (UGC), to award degrees as specified by the UGC under section 22 of the UGC Act, 1956.USTM is recognised by UGC and approved by AICTE, and NCTE, Ministry of Human Resource Development, Government of India. USTM has also complied to UGC's 12(B) status.

The **University of Science and Technology, Meghalaya** (or simply **USTM**) is an autonomous university in India located at Ri-Bhoi, in the state Meghalaya. It is the first State Private University on Science and Technology in the entire Northeast India. The University is established through the University of Science and Technology, Meghalaya Act, 2008 of the Government of Meghalaya. This University is a project of Education Research & Development Foundation (ERDF), the largest educational network in the North Eastern region of India (https://en.wikipedia.org/ wiki/University_of_Science_and_Technology,_Meghalaya).

Department of Library and Information Science , USTM

Libraries are the backbone of any developed society. It is said that "the nation who reads, is the nation that leads". This statement is true for the development of any society and Library Science is a systematic process of organizing and maintaining books, magazines and journals. Library science deals with categorizations of knowledge and information. So, in this regard

the department tries to make the society educated formally and informally through the classroom method by training young professionals and also help in the continuing education as well as adult education programme.

5.13 Career Scope

* There are lots of career opportunities available for library science professionals and Librarianship as a profession provides a variety of employment opportunities;

* Trained library professionals can find opportunities for employment both as teacher and as a Librarian. Qualified librarians in this field can seek employment in academic institutions, schools, government and public libraries, news and broadcasting agencies, universities and in private libraries.;

* Career aspirants, on successful completion of the course can secure jobs as administrators, budget analysts or executives in both NGOs and local government bodies. Aspirants can opt for job prospects in government sectors both Central and State Service Commissions. Professionals with doctorate degree can join in administrative management sector, teaching, industrial sector, personnel management sector and social service sectors as well.

* In Librarianship, designations could be Librarian, Documentation Officer, Assistant Librarian, Deputy Librarian, Scientist (Library Science/ Documentation), Library and Information Officer, Knowledge Manager/ Officer, Information Executive, Director/Head of Library Services, Information Officer, and Information Analyst.

5.14 Faculty Members at USTM

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE			
1	DR. P.K BAROOAH	PROFESSOR	Ph.D
2	Mr. GAUTAM GOGOI	ASSISTANT PROFESSOR& COD	MLISC,M.A., B.ED,NET
3	MR. BIKRAMADITYA BARMAN	ASSISTANT PROFESSOR	MLISC,PGDCA
4	Ms. AMRITA DEVI	ASSISTANT PROFESSOR	MLISC
5	MR. RAJESH CHUITA	ASSISTANTPROFESSOR	MLISC, MPHIL, NET

Head of the Department :DR. P.K BAROOAH

ICFAI University, Agartala, Tripura (https://www.iutripura.edu.in **)**

ICFAI University, Tripura is a nonprofit private university located at Agartala, Tripura, India. It was established in 2004 through an Act of State Legislature (Tripura Act 8 of 2004). The university's constituent college, ICFAI Law School, was ranked 28 by *India Today*'s "India's Best Colleges 2018: Law .

Like all universities in India, ICFAI University, Tripura is recognised by the University Grants Commission (UGC). The courses of the ICFAI Law College are approved by the Bar Council of India (BCI). The university is a member of the Association of Commonwealth Universities (ACU) and the Association of Indian Universities (AIU).

Department of Library and Information Science

The University offers campus –based fulltime Integrated M.Lib.I.Sc. Programme of 2 years'duration which comprises of four Semesters of study leading to a Master of Library & Information Science degree. It has been started in 2015 and Master of Library and Information Science course has been started in the year 2016. One Associate Professor and one Assistant Professor are running the Department. The total Intake Capacity is 25.

Head of the Department :**Dr. B. Panda**

Issues and Challenges for Imparting Quality LIS Education and Research

For managing quality education, CBCS system has been introduced in all the universities of North Eastern Region of India which have been offering B.Lib.I.Sc. / BLIS/ BLISc and M. Lib. I. Sc. / MLIS / MLISc courses. As per UGC guidelines, revision of Course Curricula is a regular feature and all the departments are time to time updating the syllabi and try to introduce emerging technologies which are being used in the Libraries for providing Technology based library services. All the departments have focused on producing the Library and Information Professionals who can take the challenges of next generation library systems and web technology based personalized services where users want more customizes and precise services for their information needs to meet the challenges of education and research. The NET qualified students are getting appointments in colleges, universities and institutions of higher learning of national importance

and in many technical libraries, public libraries, school libraries and media libraries.

In coming future, the LIS departments of North East India have to face lot of challenges to maintain quality education and sustain the flow of students to take up the courses. We have to market the LIS Dept. to attract meritorious students from across disciplines so that we may produce librarians who can take up the challenges of science & technology, management, medicine, engineering, social sciences, traditional colleges and universities, school and public libraries. In order to keep our relevance in society, we have to inculcate the blended learning to the students and scholars to make them able to cope up with the new challenges.

Conclusion

From the above bird's eye view on the status of LIS Departments of North East India , it has been concluded that there has been tremendous growth in the development of Library and Information Science Education and Research in North East India. The faculty members have been contributing in terms of teaching and research and producing NET qualified LIS professionals who are ready to take up the new challenges to organize and manage the modern new generation library systems and services and take up LIS Teaching and Research in the new area of Librarianship and Information Management.

The younger generation faculty members and scholars are working in various areas of Librarianship both in traditional and modern librarianship and producing high quality research publications and also producing brilliant LIS graduates and scholars. The passed out students form these universities have been appointed in schools,colleges, universities and Govt. / Private institutions and organizations. We are confident that the coming LIS professionals will have bright future and career ahead.

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10

Library and Information Science Education in Mizoram

Pravakar Rath

Brief Background

With the introduction of library legislation in Mizoram in 1993 consisting of a good network of public libraries, university and college libraries, department and special libraries, the Mizoram University authorities felt it necessary to have an independent department of Library and Information Science in the newly created Mizoram University (2000) in order to meet the manpower requirement of these libraries and there was no need to go outside the state mostly to NEHU. The university took a positive step to create a department of library and Information Science (2002) with the introduction of one year BLIS (2002) and one year MLIS (2003). Before that few students interested to purse Library and information course who were already in job were admitted to BLIS and MLIS offered by Alagappa university and IGNOU through distance mode.

The department got a major boost when one professor and one Lecturer joined the department (2004) and initiated Two-Years integrated MLIS course and got it implemented w.e.f 2005 thereby winding up the one year BLIS and one year MLIS. Initially the annual intake capacity was 15, presently raised to 25 followed by Ph.D (2005) and M.Phil (2007). Simultaneously department developed infrastructure in terms of hiring a

new building in the city, ICT laboratory and Department Library. In course of time the number of regular faculty members increased to 8 supported by three non-teaching staff. It was only in 2013, department shifted to its own newly constructed building and till date functioning with steady progress in terms of academic and research output. Till date around 300 MLIS students are passed out with an approximate employment of 60% both in government and non-government sector, M.Phil around 50, and 24 Ph.D so far awarded by the university. Besides, around 20 pass out students have been awarded with UGC-NET and JRF which has added credit to the department. NAAC accredited the university in the year 2014 with "A" Grade with a comment to Library and Information Science department as "Most Dynamic and Vibrant Department'.

Vision of the Department:

The objectives of the department are**:**

* emphasis on emerging areas of LIS Education, Training and Research

* create specialized manpower in the areas of Library Automation, Networking and Digitization (LAND) and compete in National and Global Job Market

* orient LIS Professional as Knowledge Professional in the emerging knowledge scenario

* provide a vision for professional leadership at national and global level

Courses Currently on Offer

(A) Master of Library and Information Science (MLIS)

As stated earlier, the department offered two years integrated Master of Library and Information Science (2005) with time to time revision and adopted Choice Based Credit System (CBCS) as per UGC guide line.

COURSE STRUCTURE FOR MLIS UNDER CBCS (Revised in 2018)

No	Course Code	Course Name	Credit Distribution				Marks
			L	T	P	Total	(Scaled)
FIRST SEMESTER *(Foundation Course=4; Core Courses=18; Total: 22 Credits)*							
1	LIS/1/FC/01	Foundation of Librarianship	2	0	0	2	100
2	LIS/1/FC/02	Foundation of Information Science	2	0	0	2	100
3	LIS/1/CC/03	Basics of Information & Communication Technology	4	0	0	4	100
4	LIS/1/CC/04	Organization of Knowledge I – Classification Theory	4	0	0	4	100
5	LIS/1/CC/05	Organization of Knowledge II – Cataloguing Theory	4	0	0	4	100
6	LIS/1/CC/06	Library Classification Practice	0	0	3	3	100
7	LIS/1/CC/07	Library Cataloguing Practice	0	0	3	3	100
		Total	16	0	6	22	700
SECOND SEMESTER *(Foundation Course=4; Core Courses=16; Open Electives=2; Total: 22 Credits)*							
8	LIS/2/FC/8	Introduction to Information Sources	2	0	0	2	100
9	LIS/2/FC/9	Introduction to Information Services	2	0	0	2	100
10	LIS/2/CC/10	Management of Library & Information Centres	4	1	0	5	100
11	LIS/2/CC/11	Personality Development & Communication Skill	4	0	0	4	100
12	LIS/2/CC/12	Information Sources & Services – Practice	0	0	4	4	100
13	LIS/2/CC/13	ICT Practical	0	0	3	3	100
14	LIS/2/OE/14	E-Resources	2	0	0	2	100
		Total	14	1	7	22	700
THIRD SEMESTER *(Core Courses=12; Specialization Courses=8; Open Electives=2. Total=22 Credits)*							
15	LIS/3/CC/15	Information Retrieval Systems	4	0	0	4	100
16	LIS/3/CC/16	ICT Applications in Libraries – Theory	3	0	0	3	100
17	LIS/3/CC/17	ICT Applications in Libraries – Practice	0	0	3	3	100
18	LIS/3/CC/18	Job Diary (Library Practical Work)	0	0	2	2	100
19	LIS/3/SC/19A	Academic Library System	4	0	0	4	100
	LIS/3/SC/19B	Public Library System					
20	LIS/3/SC/20A	Preservation & Conservation of Library Materials	4	0	0	4	100
	LIS/3/SC/20B	Information Resource Development					
21	LIS/3/OE/21	Community Information Service	2	0	0	2	100
		Total	17	0	5	22	700
FOURTH SEMESTER *(Core Courses=14; Specialization Courses=8. Total=22 Credits)*							
22	LIS/4/CC/22	Information Systems & Networks	4	0	0	4	100
23	LIS/4/CC/23	Research Methodology	4	0	0	4	100
24	LIS/4/CC/24	Content Management & Digital Library- Theory	2	0	0	2	100
25	LIS/4/CC/25	Content Management & Digital Library- Practice	0	0	2	2	100
26	LIS/4/CC/26	Curriculum Stipulated Study Tour – Tour Report	0	0	2	2	100
27	LIS/4/SC/27A	Intellectual Property Rights & Copyright	4	0	0	4	100
	LIS/4/SC/27B	Knowledge Management					
28	LIS/4/SC/28A	Internet & Its Applications	4	0	0	4	100
	LIS/4/SC/28B	Information Literacy					
		Total	18	0	4	22	700
GRAND TOTAL			65	1	22	88	2800

Note: Foundation Courses should be of 2 credits each. Core Courses (Basic) should be within 2-5 credits each. Specialization Courses should be within 3-5 credits each. Open Electives should be of 2 credits each. Core & Specialization Courses may be unitized into 4–6 units as per convenience of the Department. Project work/Seminar/Field work/ Internship/Training shall be treated as Core Course.

FC= 8 Credits; CC=60 Credits; SC=16 Credits, OE=4 Credits; Total 88 Credits.

(B) Master of Philosophy (M.Phil)

In order to provide an upward movement of professional career opportunities for MLIS students, the department decided to offer M.Phil in Library and Information Sciencein the year 2007. The students admitted for this course are exposed to current trends and developments in the subject, developing seriousness to be more careers minded by clearing UGC-NET/JRF and motivated to undertake research activities. Besides, pass out students if employed in university and college set up are awarded with two advance increments, eligible for UGC stipend in central universities and eligible for Rajiv Gandhi/Maulana Azad Fellowships.

Objectives: The following are the objectives of the course to:

* provide the students an understanding and strong theoretical, practical and innovative base on emerging areas of Library and Information Science.

*acquaint and expose the students to different methods, techniques associated with scientific management of Libraries and Information Centers.

* provide an in-depth exposure to the latest trends and developments of ICT and its application in LICs with special emphasis on Library Automation, Networking and Digitization.

* appraise students the various research methods and tools essential for data collection, analysis and interpretation.

Course Structure & Duration

The course comprises two consecutive semesters leading to Master of Philosophy in Library and Information Science (M. Phil.). The duration of the program shall be for a minimum two (2) consecutive semesters / one year and a maximum of four (4) consecutive semesters / two years.

The university follows UGC Ordinance on M.Phil/Ph.D -2016 and credit system as stated below.

The annual intake capacity is 6 out of which 5 candidates will be admitted through entrance test and viva voce on merit and 1 seat is reserved for in service/ deputed candidate.

M.Phil/PhD COURSE WORK

SCHEME OF PAPERS
UNDER CREDIT SYSTEM (Revised in 2017)

No	Course Code	Course Name	Credit Distribution				Marks (Scaled)
			L	P	T	Total	
Course work							
1	MPLIS/01	Research Methodology	3	0	1	4	100
2	MPLIS/02	Information and Knowledge Society: LIS Perspective	3	0	1	4	100
3	MPLIS/03	Library and Information Technology Management	3	0	1	4	100
		Total	9	0	3	12	300
Project/Dissertation							
4	MPLIS/04	Project/Dissertation	0	12	0	12	300
		Total	0	12	0	12	300
GRAND TOTAL			9	12	3	24	600

(C) Doctor of Philosophy (Ph.D)

The department is admitting doctoral students since 2005 and presently all the seven faculty members are recognised research supervisors .So far 24 scholars have been awarded with Ph.D on different emerging areas of library and information science out of which some of them are interdisciplinary in nature.Department strictly follows UGC regulation on PhD (2016) in which completion of course work, presentations and publications are given much importance. Some of the thrust areas of research in library and information science given much importance are-

Digital Library-Tools, techniques and evaluation

Content Management in Electronic environment
Adoption of metadata standards and access to information
Evaluation of Library website, Search engines,
Institutional repositories
Social Media and its impact on library and information services
Evaluation of Open access Vs. Licensed information products/ e-resources and services
Digital Literacy- Strategies and Areas of Competencies
IPR and copyright in electronic environment
Evaluation of Information Systems and Services
Evaluation of Search Engines and Social Networking Sites

The Department provides research facilities to Ph. D. & M. Phil. Scholars like, free Internet access, Department Library, and Research Scholars Room etc.

Infrastructural Facilities at Department

A) Faculty

The department is currently having eight sanctioned positions of faculty members consisting of Professor, Associate Professors, and Asst. Professors out of which seven are in position who are highly serious and motivated to undertake all types of academic and research assignments. "Faculty is Testimony of Success" for which the department could be able to produce a good number of UGC-NET/JRF, Doctoral and M.Phil scholars, employment opportunities, guiding scholars to contribute and publish papers in national and internationals journals and seminars/ conferences ,five faculty members were awarded with research projects from UGC and ICSSR which goes to the credit of the department.

B) ICT Laboratory

The Department established a state-of-the-art ICT Laboratory which allows the MLIS students to undertake their Information and Communication Technology Practical in every semester. The ICT Laboratory is equipped with 25 (Twenty) Computers with Internet facility. Since the Department is constantly revising its syllabus latest in 2018, the curriculum stipulates Digital Library and Content Management Software (CMS) practical. For this purpose, Department acquired Dreamweaver Software for website

designing, maintenance and development. Besides this, a hands-on-experience is provided in integrated Library Automation Software (Koha), Digital Library Software (DSpace), and Content Management Software (Joomla!). The Department is also well furnished with dedicated Laptop and ceiling mount LCD Projector for teaching, demonstration. The Department also facilitates M. Phil. and Ph. D. Scholars to use the ICT Laboratory for Internet access as well as Project preparation etc.

The Department has three different classrooms for teaching-learning fully equipped with separate set of Laptop-LCD Projector-Display Screen. Faculties of the department are providing ICT based classes to respective students. The classrooms have access to free Internet service connected through free Wi-Fi.

C) Department Library:

The Department established a Department Library since 2005 for Faculties, Students and Research Scholars. The library is well equipped with Classification Schedules like, Colon Classification (6th Ed.), Sears List of Subject Headings, Library of Congress Subject Headings, 26 sets of Dewey Decimal Classification (23rd Ed.),Universal Decimal Classification and Cataloguing Codes like Anglo-American Catalogue Code (Rev. Ed.) to support the practical classes in the Department. The Department Library is also having user-centric Reference Materials, Project Reports, Job Diary Reports, and Curriculum Stipulated Study Tour Reports to support the students for preparing practical records and examinations. The Department Library is fully automated using SOUL 2.0. The library is maintained by a professionally qualified Technical Assistant.

D) Curriculum Stipulated Study Tour (CSST):

The Department has a provision for incorporating Curriculum Stipulated Study Tour (CSST) as a compulsory component of Syllabus in 4th Semester. The primary aim of the CSST is to enable the students to:

* Acquaint the organization and management of established Libraries and Information Centers at national level.

* Expose them to the automated and networked libraries on-site.

* Make them understand the services provided by these Libraries and Information Centers.

* Evaluate a comparative and critical study among these libraries visited, and

* Get a practical exposure of the latest trends and development on Library and Information Science scenario.

E) Professional development/Capacity Building Programme

Since the inception of the department till date, the department regularly conducts a number of professional development /Capacity building programmes with an objective to develop the professional standards of library and professionals of Mizoram, north-eastern region and country as a whole. Till date, as many as 35 professional development programmes have been conducted in the form of seminars/ conferences, workshop and training programmes, Orientation programme, UGC refresher courses including one international conference there by bringing visibility of the department at national and international level.

SWOT Analysis of the Department

Strength:

(i) Department adopted CBCS with updated MLIS syllabus

(ii) State-of-the-art ICT Laboratory and Departmental Library.

(iii) Qualified and experienced 7 teaching faculty and 3 Non-Teaching staff.

(iv) Organize National level Conferences/ Seminars/ Workshops.

(v) Extended professional assistance to librarians and libraries located in Mizoram and NE region as well.

(vi) Department is well recognized at national level.

Weaknesses:

(i)Attracting participants from other States of India to participate in professional events.

(ii) Attracting students and scholars from other States for MLIS, M. Phil. & Ph. D.

(iii) Guaranteeing residential facility to students and scholars coming from other States

Opportunities:

The department with all necessary infrastructure and facilities can bring out a scholarly journal, organize international professional events, and

initiate research collaboration and partnership since Govt. of India has special consideration for promoting educational opportunities in North-East Region.

Threat:

(i) Providing employment opportunities for all pass-out students

(ii) Creating a competitive environment and motivating the students to go outside the

State to undertake research work and employment

iii) Providing facilities to research scholars and establishing an advanced ICT lab to carry

forward education, training and research activities of the department.

Road Map Ahead to Ensure Better Visibility:

Keeping in view the changing information scenario and national, global job market, the department has planned a definite road map in terms of education, research and training. Some of the initiatives under planning are to bring out a scholarly journal of international standard, establishing an advanced centre of Digital Library & E-resource management, Organizing International seminars and other professional events which will have more visibility at regional, national and international level. Efforts are on to bring more research projects, collaboration and partnership with national and international professional bodies, faculty exchange programmes, attracting international students and scholars to make the department more visible at national and international level.

Conclusion

Library and Information Science education in Mizoram have been able to fulfil the professional expectation of the working professionals and as well as motivated and prospective students in getting job, promotions, and pursuing research programmes like M.Phil and Ph.D. These courses and other professional events have opened the eyes and years of pass out students in contributing articles in seminars and conferences, journals, participating national and international events, keeping abreast with latest trends and developments of the subject, creating librarians forum in social

media and attending professional programmes abroad. The department is committed to extend all its academic and professional support to all library professionals in the greater interest of the university, state, region and country as whole in the process of nation building.

(*The author has prepared this article based on Department records, Mizoram University Annual Report, personal experience of being associated with the department for the last 15 years, 2004- Till date*)

11

Trends of LIS Education, Research and Training in Manipur

Ch.Ibohal Singh

The Background

Education, Research and Training (ERT) in any branch of universe of knowledge has been increased their momentum throughout the world today. Library and Information Science (LIS) is also not an exeption to this. For the first time in the history of the world, Library School was first established in 1887 at the New York City which was subsequently shifted to Albany in 1889. The subject (LIS) has been developed as an independent discipline of social sciences in relationship with the complexities of information and knowledge transfer. As one of the fast changing and growing fields in higher education , LIS has now gained much importance in the present day knowledge society(Ibohal Singh, Lahiri & Devi, 2005). ERT in LIS in the country has gone a long way since independence. LIS is witnessing a vast change ,upheaval and revolution today. There has ,in fact,been a tremendous change in ERT in LIS. This reflects the existing infrastructure of libraries ,information centres, documentation centres , information services, information networks, etc. within the country. Establishment of Library School in India can be traced back to 1911 at Baroda when W.A.Borden, an American Librarian was hired by Maharaja Sayajirao Geackwad to impart training in Librarianship. After four year in 1915, a more systematic three months training course was initiated by Asha Don Dickinson, who joined as a Librarian in Punjab University, Lahore (now in Pakistan) (Gayasuddin,*et al,* 1988*)*.The first systematic training programme in Library Science was started in Madras (Now

Chennai) in 1929 when Prof. S. R. Ranganathan started a Certificate Course under the auspices of Madras Library Association (MLA) in collaboration with the Madras University. The course was upgraded to a post graduate full time Diploma Course in 1937. University of Delhi was the first university in the country which started Research Programme in the field of LIS. The first Ph.D. Degree in LIS was awarded by the University in 1957 to Dr.V.K.R.D.Rao. Professional Associations in the field also have been playing a vital role in ERT. In this regard, initiatives taken up by Madras Library Association, Bengal Library Association, etc in conducting Certificate Courses are significant. Today there are about 200 universities and institutions that are imparting LIS education in India from certificate to doctorate degrees(Karisiddappa & Asundi, 2011).The aspects on ERT in LIS in respect of Manipur began since 1987 with the establishment of the Department of Library and Information Science under Manipur University.There are also some other institutions contributing towards LIS education in Manipur. An attempt is being made in this paper to highlight the current status of ERT in the state.

The Objectives

The objectives of the present paper are:

a) To study the institutions associated with ERT in LIS in Manipur with particular reference to Manipur University.

b) To assess the levels of courses and programmes undertaken.

c) To analyse the current status of the ERT in the state.

d) To highlight certain points for the future of ERT in LIS in the state.

Scope of the Paper

a) The institutions associating with ERT in LIS in Manipur have been surveyed;

b) The formal courses available in these institutions have been ascertained;

c) The programmes of Manipur University have been emphasised upon;

d) The outputs of the institutions have been highlighted;

e) Research Programmes and their outputs have been discussed;and

f) Continuing Education Programmes as a component of LIS Education have also been covered.

Institutions Associating with ERT in LIS in Manipur

The background of the organisations and institutions associated with ERT in LIS in Manipur is discussed in the following sections. Their programmes and activities are related with ERT in the field.

Manipur University

The establishment of Department of Library and Information Science under Manipur University on the 2nd April 1986 has really created a milestone in the history of ERT in the field in the state. The credit for the same goes to late Prof. M.R.Kumbhar, a distinguished library scientist of the country. While serving as the Librarian of the University he took pain and initiative to establish the same. The Department is under the School of Social Sciences. It introduced the Bachelor of Library & Information Science (BLISc.) programme in the year 1986 with an intake capacity of 40 students in response to the demand for training human resources in the field for the North East India in general and for the state of Manipur in particular. It has also been providing facilities for carrying out research programmes leading to Ph.D. since 1987 under the guidance of Prof. Kumbhar. The proposal for opening of one year programme of Master of Library & Information Science (MLISc) was made during the year 2003 which was formally approved in the Academic Council Meeting of the University held on 14.10.2003. As such, the Department introduced the programme since the academic session 2004 (22nd September, 2004) with an intake capacity of 6 students with the facility of lateral entry scheme till 2009-2010 session. Further, fresh proposal was made for introduction of Two Years Integrated MLISc Course in 2005, which was approved in the Academic Council Meeting of the University held on 5th October, 2005. Subsequently, the course was also introduced in the Department from 2006-2007 academic session. Presently, the Department is running with five faculty members comprising of two Professors, three Assistant Professors and one Guest Lecturer. The non-teaching staff of the Department include : one Junior Assistant and one Peon. The Central Library and the National Service Scheme (NSS) Cell of the University also involve in the activities particularly in continuing education programmes in the field. The UGC-Human Resource Development Centre (HRDC) of the University also conducts such programmes from time to time.

Other Institutions

Some institutions in Manipur also involve in conducting LIS courses, short term courses and continuing education programmes.They are enumerated below:

IGNOU Study Centre

The IGNOU Study Centre, Manipur University offered BLIS Programme since 2001 and thereafter MLIS programme since 2002 under distance learning programme. The centre has peoduced nearly 200 BLIS and MLIS graduates so far.The same conducts regular counselling sessions, seminars and practical classes for the students.

National Institute of Open Schooling (NIOS)

As a collaborative effort of the State Central Library (SCL), Imphal and Manipur Library Association (MALA), CLIS course was conducted during 1998-2000 at the office of the later . Around sixty certificate holders in LIS have been produced during the said period. Unfortunately, the course has been discontinued.

L. B. Institute of Technology and Management, Imphal

This registered Institute, as a study centre conducts different IT, Management, LIS, etc.courses under different correspondence programmes of different Universities/Institutes. As a study centre for Allahabad Agricultural Institute(Deemed University) the Institute conducts BLIS and MLIS courses. It also conducted M.Phil. progrmmes under the Vinayaka Mission University , Salem, Tamil Nadu.

NIELIT, Imphal

The National Institute of Electronics and Information Technology (NIELIT) (formerly DOEACC Centre and CEDTI), established in 1987 and operational in 1988 has introduced short term courses on "IT Applicationn in Library Science" since June 2003 and Library Automation by Using Koha since 2015.

SCERT, Manipur

The State Council for Educational Research and Training (SCERT) is also found to conduct training programme on Management of Library for school teachers during 25-29 November 1994.

State Central Library, Imphal

The State Central Library (SCL), Imphal under the Art & Culture Department, Govt. of Manipur, also has been conducting Orientation Course, Workshop, Training Camp ,etc for the management and organization of libraries mostly run by the voluntary organizations of the state. Since 1995 every year the library has been active in organizing "Two Day Training Courses" on the management and organization of public libraries under the sponsorship of RRRLF, Kolkata. The Library also is playing an important role in educating the masses about the importance of library by celebrating Library Day and National Library Week in collaboration with Different NGOs. However such programmes have not been conducted since recent past as the Manipur Library Association (MALA) is conducting similar programmes every year.

Institute of Cooperative Management

The Institute of Cooperative Management (ICM), Lamphelpat, Imphal also conducts training programmes for the library professionals on management related aspects from time to time but not regularly.

Library Associations

Manipur Library Association (MALA) since its inception in 1987, has been playing a pivotal role for the library movement in the state by conducting various awareness programmes, workshops, orientation courses, training, and organizing Conferences and Seminars, etc. These activities are important part of ERT in LIS in the state. Some major activities of the association may be mentioned of:

a) Observation of National Library Day on the 12th August every year;

b) Celebration of National Library Week during 14-20 November every year;

c) Holding of State Library Conference and Seminar as annual event, on different theme under the sponsorship of RRRLF, Kolkata;

d) Conduct of awareness, orientation, workshop,etc. at different places of Manipur in collaboration with various NGOs of the state;and

e) Organisation of symposia, essay writing competitions, quiz,debate,etc from time to time related to library.

Other Library Associations like North East Chapter of Ranganathan Society for Book Culture, Library and Informatic Studies (RAS), IASLIC Zone-5 also intermitently joined the movement in the form of organising seminar, awareness and outreaching programmes in the state.

READ India

The Rural Education and Development Foundation (READ Foundation), India also came down to Manipur and joined the library movement by establishing Community Learning Resource centres and conducting training programmes for the professionals and volunteers.The same has established two such centres in Imphal West District of Manipur for which training programmes were conducted to run and manage the centres.

On LIS Courses

From the above background information about the institutions associating with ERT in LIS in Manipur it is understood that the following courses and programmes were/are available in the state:

a) Certificate in Library and Information Science (CLIS)
b) Bachelor of Library and Information Science (BLIS)
c) Master of Library and Information Science (MLIS)
d) M.Phil
e) Ph.D.

However, the CLIS programme conducted by the State Central Library, Imphal in collaboration with MALA has currently been stopped.The BLIS programme is now available only under IGNOU Study Centre of Manipur University. The Centre offers both BLIS and MLIS programmes of one year each. Manipur University, on the other hand, offers only two year integrated programme of MLIS. M.Phil Programme which was once made available by one private institute based at Imphal under Vinayaka Missions University, Salem has also discontinued. Corrently, Ph. D. Programme is offered by the Manipur University since 1987 and as such Manipur University is the only Central University in the state offering regular LIS programmes; besides this Manipur University also offer MLIS It is also seen that NIELIT, Imphal from time to time, conducts Certificate Courses on IT Applications and Koha.

Course Curricula of Manipur University

Keeping in view the latest curriculum of the University Grants Commission (2001), the Department has tried to incorporate majority of the contents in the MLIS programme.The current curricula adopted by the Department of Library and Information Science, Manipur University for the MLIS and Pre Ph.D course work are shown below:

MLIS Curricula

The Course Content and curriculum of the ongoing two years course in MLIS is designed as a four-semester integrated course and each semester carries 400 marks, 100 marks for each paper. The course is full time course and is divided into four examinations at the end of each semester. The schemes of papers adopted by the Department for the course is given below:

First Semester

MLIS 101: Foundation of Library and Information Science
MLIS 102: Organization of Knowledge (Classification & Cataloguing Theory)
MLIS 103: Organization of Knowledge (Classification Practice)
MLIS 104: Organization of Knowledge (Cataloguing Practice)

Second Semester

MLIS 201: Information Source, System and Services
MLIS 202: ICT Fundamentals in LIS
MLIS 203: Management of Library and Information Centres
MLIS 204: Practical Records: (A) Evaluation of Information Sources (B) ICT Fundamentals in LIS (Practice) (C) Library Visit Report

Third Semester

MLIS 301: Communication and Information Science
MLIS 302: Information Consolidation, Storage and Retrieval
MLIS 303: ICT Applications in LIS (Theory)
MLIS 304: ICT Applications in LIS (Practice)

Fourth Semester

MLIS 401: Internet Technology and Networking

MLIS 402: Research Methods and Quantitative Techniques
MLIS 403: Electives
MLIS404: Dissertation/Project Work

The Course Structurefor MLIS-403 Elective

MLIS-403E-1: Information Literacy
MLIS-403E-2:Knowledge Management
MLIS-403E-3:Technical Writing& Professional Communication
MLIS-403E-4:Bibliometrics, Scientometrics,Informetrics and Webometrics
MLIS-403E-5:Integrated Information Systems and Services
MLIS-403E-6: Marketing of Information Products and Services

As per the latest instructions of the UGC, all the Departments of the University are going to adopt Choice Based Credit System (CBCS) thereby the Department also has adopted the same in the 3rd Semester with ***Paper-MLIS-301:Communication and Information Science*** to start with from the session 2016-17 onwards.

Curricula for Pre-Ph. D. Course Work

The Course is known as Pre-Ph.D. Course Work in Library and Information Science. The same is meant for the enrolled research scholars (Ph.D. Programme) of the Department of the University. The course comprises of three (3) theory papers,each paper carrying 100 marks. The structure of the course are as listed below:

Paper	Title of the Paper	Full Marks	Credit
CWLIS-1	Reserach Methodology (Compulsory Paper)	100	4
CWLIS-2	Elective Course	100	4
CWLIS-3	Review of Published Research(Compulsory Paper)	100	4
Total	Three papers	300	12

For, CWLIS-2, any one of the following Courses may be opted:

i. CWLIS-2 (a): Library System
ii. CWLIS-2 (b): ICT Application in Libraries
ii. CWLIS-2 (c): LIS Education
iv. CWLIS-2 (d): Library Management
v. CWLIS-2 (e):Trends in Bibliometrics
vi. CWLIS-2 (f): Users Study and Information Literacy

On LIS Research

With the individual and independent contributions, the nineteenth century USA and European countries have witnessed the begining of the systematic trend in reserach in the field of Library organisations (Lahiri, 1999). S.R. Ranganathan started Ph.D. Programme in University of Delhi in 1948, but the Department of Library and Information Science, Manipur University started the same in 1987.The LIS research programmes under Manipur University, is being discussed from three angles:

a) Research at Ph.D. Level
b) Research at MLIS Level
c) Research Projects
d) Research Consultancy
e) Resaerch Outputs

Ph.D. Programme

The Department has been conducting Ph.D. programme since 1987. The following tables show the position of the number of Ph.D. scholars who have been awarded the degrees, those working in progress and those registered recently in various aspects of the field.

Degree Awarded

So far the Department has produced 31 Ph.Ds in various aspects of Library and Information Science as shown under the following Table-1:

Table-1: Areas of Ph.D. Degree awarded research (1990-2018)

SL.No.	Areas of Research	No. of Ph.D.
01.	Library/Information and Systems Study	07
02.	ICT Applications, Networking, Library Automation	05
03.	Users Study	04
04.	Library Management	02
05.	Organisation of Knowledge	02
06.	Collection Development	01
07.	Professionalism	01
08.	Manuscript Study	01
09.	Library Economics	01
10.	LIS Education	01

11.	Personal Collection/Intellectual Heritage	01
12.	Traditional Knowledge	01
13.	Local Dialies	01
14.	Information Literacy	01
15.	Open Access Initiatives	01
16.	Citation Analysis	01
Total		31

Research in Progress

The table-2 below shows the areas of 11 (eleven) Ph.D. researches progressively carrying out in the Department.

Table-2: Areas of Ph.D. Research in progrees

Sl No.	Areas of Research	Number
1	Preservation, Access and Digitization	03
2	User Study	03
3	Modernization and N-LIST	01
4	Social Networking Sites	01
5	Information Literacy inPublic Library	01
6	LIS Curricula and Employability	01
7	Status of Special Libraries	01

Newly Admitted Ph.D. Scholars

Recently 10 (ten) students have been allotted to different supervisors for carrying out research in the field.

Research at MLIS Level

On various issues related to different dimensions of LIS researches are found to be carried out by the MLIS students in the final semester every year since the introduction of the programme.As on 1st January, 2019 a total of 228 (two hundred and twenty eight) MLIS Dissertations have been accepted by the University. The research at this level covers a wide range of library and its related areas including culture,education, heritage and society, etc.

Research Projects

The faculty members of the Department of Library and Information Science of the University have taken up some research projects through different different agencies. They are enumerated below:

Funded Research Projects

The following Major Research Projects under the sponsorship of University Grants Commission (UGC), New Delhi have been successfully completed:

1. Personal collections in Manipur: Documentation and Indexing for Easy Acess (Dr.Th. Madhuri Devi-Prinicpal Investigator ; Dr.Ch. Ibohal Singh-Co-Investigator and Mrs.A. Ithoi Devi-Project Fellow).

2. Documentation of Cultural Heritage of Manipur: A Study of Umang Lai(Sacred Groove) (Dr. Th. Purnima Devi-Principal Investigator, Shri H. Devajit Singh –Project Fellow).

3. Integrated Rural Development: A Model Integrated Information System for the Development of rural Areas of Manipur (Dr.Th. Purnima Devi, Principal Investigator; L. Shanta Meetei, Project Fellow).

Other Projects

Other projects associated with the faculty members of the Department include the following:

1. Research Project on "Public Library Using Habit in North East India: A Case Study of Manipur" funded by Ministry of Culture, Govt. of India,Raja Rammohun Roy Library Foundation (RRRLF), Kolkata (Principal Investigator – Dr. Ch. Ibohal Singh)(Completed).

2. Research project on "Publication of Directory of Libraries of Manipur through an Extensive Survey"funded by Department of Art and Culture, Govt. of Manipur through Manipur Library Association, MALA((Principal Investigator – Dr. Ch. Ibohal Singh)(In progress).

3. Research Project "Bibliography of the Literary Works on Tribal and Endengered Languages of Manipur (Documentation)"funded by Tribal Research Institute, Imphal (Project Supervisor: Dr. Ch. Ibohal Singh) (Completed).

4. Project on " Systematization and Modernization of TRI Library, Imphal" funded by Tribal Research Institute, Imphal (Project Supervisor: Dr. Ch. Ibohal Singh)(In progress).

Research Consultancy

Faculty members of the Department have also extended support in research consultancy programmes as listed below:

1. Consultant of the UGC(NERO) Sponsored Minor Research Project on "Role of College Libraries in Quality Assurance Education with Special Reference to Manipur" conducted by Shri Kh. Nanda Singh , Librarian at S.K. Womens' College, Nambol, Manipur (2009-10) (Consultant- Dr. Ch. Ibohal Singh).

iii] Consultant of the UGC(NERO) Sponsored Minor Research Project on Roleof College Librariesin Quality Assurance Educationwith Special Referenceto Manipur conducted by Shri Kh. Nanda Singh , Librarian at S.K. Womens' College, Nambol, Manipur (2009-10).

2. Consultant of the Project on Preservation of Rare Documents sponsored by National Archives of India, Ministry of Culture, Government of India and conducted at S.K. Womens' College, Nambol, Manipur (2008-09) (Consultant- Dr. Ch. Ibohal Singh). iv] Consultant of the Project on Preservation of Rare Documents sponsored by National Archives of India, Ministry of Culture, Government of India and conducted at S.K. Womens' College, Nambol, Manipur (2008-09).

Resaerch Outputs

The research outputs of the faculties, scholars and students of the Department have been published as: books, papers in journals, articles in seminar/conference proceedings, chapters in books, souvenirs and articles in dailies, etc. at regional, national and international levels.There is sharp trend among the scholars for publishing the findings of their MLIS Dissertations in different channels.Of the 31 Ph.D. theses so far awarded degrees by the University, 6 have been published as books.Also the findings of various funded research projects have been published as book and research papers. The faculty members of the Department have authored and published different books and also they edited different books in Library and Information Science. So far about 300 papers have been contributed by the faculties, scholars and students of the Department which have been published in professional Journals, books, and proceedings of seminars, conferences, etc.

Continuing Education Programmes(CEP)

The CEPs are found to be carried out by different agencies , as discussed, in various aspects in the form of :

* Refreshers Courses/Summer Schools/ Short Term Courses/ Seminars, etc by the HRDC and LIS Department of Manipur University fromtime to time.

* Seminars, Workshops, Conferences, Awareness and Outreaching programme by the University Department,NSS Cell, and Central Library of the University, MALA, State Cantral Library, RAS, NE Chapter, Imphal.

* Orientation Programmes,Capacity Building Programmes, Short Term Courses from time to time by University Department, Central Library of the University, NIELIT, READ India, ICM, Imphal, etc.

* The University Department also conducts memorial lectures and a series of talk programmes regularly.

Collaborations

Collaborations took place in ERT aspects of LIS in Manipur by the professionals of the state and outside the state.At the time of begining of the Department in Manipur University, working professionals from different institutions of the state were involved as Guest Faculties for the teaching programmes.It can be noted that the late Professor M.R. Kumbhar of Karnataka University, who was invited by the Manipur University to be its Librarian was the founding Head of the Department.Retired professors from Karnataka University, Bangalore University, NEHU, etc. were actively involved in Pre Ph.D. Course Works, introduction of MLIS programme, designing of new curriculum, etc. In Ph.D. guidance also, Professor from Karnataka University was involved as co-guide.Regarding continuing education programmes, the contributions of Ministry of HRD and Culture, Central Reference Library, National Library, INFLIBNET, RRRLF, READ India, Department of Art and Culture, State Central Library , etc are significant.Among the faculty members too, involvement in research consultancy programme is observed.

The Products and their Placements

Taking into account, all the institutions as discussed, the LIS products may approximately be estimated as below:

a) CLIS holders under NIOS during 1998-2000: About 60.

b) BLIS and MLIS holders under IGNOU Study Centre: About 150 BLIS holders under Manipur University: Nearly 500.

c) MLIS (both one year and two years integrated course): 228

d) M.Phil under Vinayaka Mission University, Salem, Tamilnadu through Imphal Styudy Centre i.e.,L.B. Institute of Technology and Management, Imphal: 3 (three)

e) Ph.D. under Manipur University: 31 .

f) Certificate Course of NEILIT:

a) IT Applications in Library Science: More than 20.

b) Library Automation by Using Koha : 13 .

No systematic study has been conducted to assess the placements of these products. However most of the libraries of different organisations in Manipur are manning by these trainned professionals of Manipur University and IGNOU.Professionals working in various organisations outside the state are also many but those working in abroad are very few in numbers. A detail placement study , if conducted , the rate of employability of the LIS products can be ascertained.

Conclusion

ERT in Library and Information Science in Manipur has to go a long way.The quality of education, levels and modes of courses, relevancy of curriculum, applicability of research,employability, market demand, etc. are some of the issues need to be taken care of.It is also, at the same time , necessary to initiate some innovative module-based courses as per the market demand to enhance the products more acceptable for employability. Continuing education for the working professionals also require to be continued from time to time on the emerging issues of the librarianship.While the enrichment of the faculty strength in the University is the need of the hour as it is running shortage, making them transformed is also a must to bring transformational change in the LIS sector of the region.

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12

LIS Research in DLISc, GU with Reference to Doctoral Dissertations

Narendra Lahkar

Introduction

The Department of Library and Information Science (DLISc), Gauhati University is the premier LIS department in North East India established in 1966 with one year Bachelor (BLibSc) degree programme; and later in 1978, one year Master (MLibSc) degree programme was started. In 2001, in conformity with the UGC suggestion, both the courses were merged to two year integrated Master degree programme leading the MLISc Degree with 4 semesters. Research is a part of all academic departments in any University in addition to their other academic programmes. The DLISc, GU had to introduce PhD programme in a later date of its establishment because of certain situstion of the department; the department had started with only Bachelor degree programme in LIS and no Masters programmes. Moreover, for appointing faculties in the department, Master degree in LIS was not an essential qualification and the faculties appointed at that time having Master degree in other than LIS discipline with Diploma/ Bachelor in LIS. Subsequently, all respected faculty members did their Master degree in LIS in different times after joining in the department. It is because of such uncommonness with other Post Graduate departmentd of Gauhati University, research programme leading to PhD was not introduced in the DLISc, GU at the time of itd establishment. Of course, the course contents of BLibSc, a paper named "Bibliographic Project" based mainly on literature survey on an assigned

area was included for the study and the paper was treated as "initial stage of research work" for the students in the course.

Research in DLIS, GU: Initial Stage

The department is revising its syllabus at regular intervals incorporating new ideas, knowledge and development of LIS field to make the course more effective and accountable. While introducing the revised syllabus in its academic programme, the paper on "Bibliographic Project" is continuously included in its syllabus at Bachelor level; presently besides bibliographic project, some additional areas like content analysis of select journals/ magazines, study of library websites are also incorporated. With the switching over from one year Bachelors and one year Masters Programmes to two year integrated Masters programme, this paper is also included in the third semester of the four semester MLISc course. Inclusion of this survey based paper in addition to other papers for the beginners of LIS course can be considered as an initial stage of research for the students of the department while pursuing the LIS course.

From the introduction of MLISc course in the DLISc, GU, be the course is either one year or now two years, a full paper "Dissertation" is introduced as a compulsory one to be done and submitted by each student in the final (now in fourth semester) examination. The goal of the paper is to train for inclination of LIS students towards research and ground work of pursuing research in depth in future is being imparted to them. With the continuation of this paper, the LIS products are found to develop their knowledge and expertise for taking up the research work for furthering their knowledge and skills in their academic and professional lives.

The Department has started MPhil in LIS in its Golden jubilee year (2016/17) of establishment with 5 intake; presently third batch of students is pursuing MPhil Course. As usual, this course has dissertation work weightage with half of the whole course (ie 300 marks of the total 600 marks). Here also, we have seen the creation of research environment and students pursuing MPhil are also developing inquisitiveness towards further research.

In addition to such research oriented course at the Post Graduate and MPhil levels, the Faculty members of the department are engaged in number of research projects being funded by different organizations as the

Project Director or Principal Investigator. The First one directed by Prof Alaka Buragohain with NEC Funding entitled "An annotated bibliography of the socio cultural and socio economic conditions of the North East India" completed successfully. The second and third one are with Prof Narendra Lahkar as Director/ Principal Investigator entitled "Rural libraries of North East India: a machine readable database" and "Establishment of model North East India University Library Network (NEIULIBNET)" funded by ICSSR and by UGC respectively. The other one is in continuation by Dr Badan Barman funded by Gauhati University entitled "Academic social network of Gauhati university: a platform to connect students, research scholar, staff, and alumni with one single thread" with a two year duration. The projects are not categorized as minor or major except the second one of Prof Lahkar (SlNo 3 below) categorized as the UGC-Major Research Project. Dr Badan Barman has jointly completed two other projects funding from different sources prior to joining in the Department as Asst Professor and is excluded from the list. A detail of the projects are listed below:

Table 1: List of Research Projects at the Department (Completed/ Continuing)

SlNo	Director/ Principal Investigator	Funded by	Amount (in Lacs)	Duration (from - to)
1	Prof Alaka Buragohain	NEC, Govt of India	4.95	20/02/1992 to 19/02/1995
2	Prof Narendra Lahkar	ICSSR, Govt of India	3.15	01/07/2005 to 30/06/2008
3	Prof Narendra Lahkar	UGC	10.20	01/07/2015 to 30/06/2018
4	Dr Badan Barman	Gauhati University	2.0	20/03/2018 to 19/03/2020

(https://www.gauhati.ac.in/arts/library-and-information-science)

Research leading to PhD: a study on doctoral dissertations

At the beginning of the DLISc, GU (1966/67), only the Bachelors Programme leading to BLibSc degree was introduced and subsequently the Masters programme (1978/79) was introduced leading to MLibSc

degree. These were the post graduate courses and research programme for the degree of PhD was developed in later date only. It was because of the faculty members of the Dept who were appointed without PhD had to try hard for creating and introducing PhD programme in the Dept; but not possible for the non availability of PhD research guides attached to the Dept. Dr R L Mittal, the then Lecturer of the DLISc, GU had to pursue for his PhD in the Dept of Political Science, GU; while Prof Narendra Nath Sharma former Prof and Head, DLISc, GU, did his PhD in the Dept of History, GU. Prof Rajani Kant Barman, who is the first PhD from the DLISc, GU had to be guided by a professor from the Dept of Political Science, GU.

Recognized Guides

Non availability of PhD research guide is a major hindrance towards introducing PhD programme in the DLISc, GU. Prof Alaka Buragohain, former Prof and Head, DLISc, GU obtained her PhD from the Department with independent guidance. With the recognition of guide ship to Prof Alaka Buragohain, Prof Narendra Nath Sharma, Prof Rajani Kanta Barman Prof Narendra Lahkar, also Prof Sanjay Kumar Singh, research works of the department leading to PhD initiated and got momentum also. Besides, Dr Tilak Hazarika, Dr Dipen Deka both from the DLISc, GU and Dr Dhrubajit Das, Librarian (Selection Grade), SB Deorah College, Guwahati are other recognized Guides in the Dept with whom research covering different areas of LIS are completed/ under taken by the LIS scholars either as full timers and part timers. A number of UGC-JRF (Later SRF) have also completed their PhD from the Dept and some are continuing in addition to the part time scholars. Till recently, a total of 71 scholars are awarded with PhD degree from the DLISc, GU **(Annexure 1)** with the guides as below:

Table 2: Research Guides and Number of Scholars awarded/ Continuing PhD (till 31st December, 2018)

SlNo	Guide	Awarded	Result Awaited	Continuing
1	Alaka Buragohain	14+	x	No
2	Dhrubajit Das	No	x	2
3	Dipen Deka	No	x	4
4	Narendra Lahkar	19	2	6
5	Narendra Nath Sharma	18	1	No
6	Rajani Kanta Barman	11	x	7
7	Sanjay Kumar Singh	08	1	7
8	Tilak Hazarika	No	x	4
	Other than LIS Dept	01	x	No
	Total	71		
	+including independent one			

Note: As on January 02, 2019, of the total theses 4808 uploaded from GU, there are 46 theses of Library and Information Science. (http://shodhganga.inflibnet.ac.in/handle/10603/5442)

Prof Burahohain and Prof Sharma, due attaining maximum age as per PhD regulations of GU, are now not guiding any research scholar; although, result of one of the research scholar with the guide ship of Prof Sharma is awaited. Prof Sanjay Kumar Singh had to be the research guide of one PhD Scholar from the Institute of North East Studies, GU, the scholar has submitted his thesis and result is awaited. In the case of Dr Hazarika, Dr Deka and Dr Das, because of their initial period of recognition, no scholar is awarded PhD with their guides ship though recently one scholar with Dr Hazarika has presented Pre PhD seminar enabling to submit the thesis for the PhD on fulfilling other necessary requirements.

Growth of PhD awardees

As mentioned, the DLISc, GU has included PhD programme in its academic programmes late because of its special nature; the Bachelors in LIS leading to BLibSc (later BLISc) was the course at the time of establishment of the Dept ie in 1966/67. Again in 1978/79, the one year Master degree course was introduced with no scope for the PhD programme. Faculty member of LIS were to in search for guides in other

departments and in 1991, with the award of PhD to Prof Rajani Kanta Barman with a guide from the Dept of Political Science, GU, a strong demand for introducing PhD programme was made. In a later date, PhD guide ship was recognized to Prof Buragohain, and other faculties and research programme leading to PhD was introduced in its academic programmes of DLISc, GU. Due to non availability of the Research Guides in DLISc, GU and also because of the experience, and expertise, Prof Buragohain was allowed to submit her thesis independently which can be termed a mile stone in recognising of the academic and research activities undertaken by the department on the growth and development of LIS discipline in the region. After Prof Buragohain and Prof Barman being awarded the degree of PhD from the Gauhati University in DLISc, GU there is marked growth of PhD awardees as reflected from the table below (Table 3).

Table 3: Year wise growth of PhD awardees

Year	Number	Cumulative		Year	Number	Cumulative
1991	1	1		2009	6	27
1996	1	2		2010	3	30
1998	1	3		2011	2	32
2000	1	4		2012	3	35
2003	2	6		2013	6	41
2004	2	8		2014	3	44
2005	3	11		2015	4	48
2006	3	14		2016	11	59
2007	3	17		2017	7	66
2008	4	21		2018	5	71

NB: Years not awarded PhD are not shown in the table

Subjects Coverage

Though the main subject of the topics for all PhD theses is Library and Information Science, the areas in each topic are distributed in different sub areas. Ranging from Academic library and its different sub fields, the topics covered in research are found to be from traditional/ conventional librarianship to automated; offline resources to online including web resources of different disciplines; human resource development and personnel management, etc with different approaches. In the present study, the title of the theses is scanned independently and the author tries to assign a specific subject (not keywords here) taken from the title of the particular thesis. In most cases, one area cannot be assigned as the title covers more areas with one as focal point. Accordingly, the focal (or umbral as per Ranganathan's approach) subject and the penumbral one are identified and assigned. It is found that all the titles of which the subject(s) so assigned are almost different except two "Information Retrieval" and the "Special Library-S & T library" covering more than one dissertation even though these two specific subjects also have separate approaches. An alphabetical list of subjects assigned to the title of theses are placed in the following table (Table 4).

Table 4: Subject Coverage

Academic Library-Human Resource Development

Academic Library-Information Technology
Academic Library-Sociology

Agricultural Literature-Growth Automated Cataloguing-University Library

Bibliometric Study-Physics Buddhist Manuscripts-Arunachal Pradesh

Children Library-Assam

Collection Development-Special Library Collection Development-University Library

College Library-Barak Valley College Library-Tinsukia Digital Resources Management-
University Library

Document Description-University
Library

Documentation Works-Forestry Literature

Documentation-Women's Study Centre Earth Science Periodicals-University

Library

Five Laws of LIS-IT environment Health Science Library-Management Hybrid library-Planning INFLIBNET-University Library Information Retrieval-Search Engines Information Technology-Library Management

Legal Literature-Customary Law Library Automation-HRD Library Automation-Serial control Library Automation-Software Packages Library Consortia-Agricultural University

Library Managemen Financial Institutes

Library Management-Institutional

Repository
Library Management-Manuscript Library Marketing-NE India

Library resource Use-University Library Library services- Paramedical Colleges LIS Education-ELearning

LIS Education-NE India Motivation-Library professional Naga Literature-Growth

Non formal learning-Library support Online Reference Sources-Engineering Online Resources-University Library Open Sources-ILMS Preservation-Audio Visual Materials Preservation-Digital Collection Preservation-Sanchi Manuscripts Public Library-Arunachal Pradesh Public Library-Bhutan

Public Library-Information needs Public Library-Nagaland Public Library-Social Harmony Rural Information-News

Rural Library-Sarba Siksha Abhijan Special Library-Assam Legislative Assembly Library
Special Library-Bibliometrics

Special Library-IT
Special Library-S & T Library

Special Library-Social Science
Special Library-Socio Economic Impact

Tea Literature-Growth

University Library-Continuing Education

University Library-HRD University Library-Internet Service University Library-Job Satisfaction University Library-Personnel Management

User Education-Academic Library Web Resources-Engineering Web Resources-Management Websites-University Library

It is evident from the subject covered in doctoral dissertations that the core LIS Subjects like classification, cataloguing, subject headings, etc are finding less importance or even neglected in the title already covered. Besides, new and advance areas of study in LIS are also found to be neglected. Areas like Advance library services, MOOCs, Web page designing and hosting, Social networking sites with different approaches like users study, users satisfaction, users requirement, present facilities

extended or availed are some of such areas inviting attention of the researchers for taking up for their PhD. As we know, no subject is static and with the passage of time, LIS also developing in different spheres. Especially, with the application of ICT devices in library operations and services, the LIS discipline is developing in different directions. It is essential to keep pace of the newly developed areas by the researchers and identification of new areas and to conduct in-depth study and research are very much essential in a developing discipline LIS.

Keywords identified in the theses

A number of concepts are covered in the research area of each doctoral dissertation; although one specific subject are assigned in each title for the present study in order to have an idea on the study made by the researchers indicating his/ her specific subject of study. In many cases, the researchers have covered beyond the specific subject as assigned in the present study. To have proper reflection of the subject areas covered in each study, a number of keywords are assigned trying to reflect the work done by the scholars in proper perspectives. Accordingly, a list of keywords covered or reflected in the each title is prepared indicating number of theses with the particular keyword.

As is evident, in all there are 25 theses (out of 71) where "Assam" is a keyword, indicating that the research works are covering the study area Assam most; followed by University Library (17), NE India (14), Public library (9), Academic library and ICT (6 each), HRD and Special library (5 each), Collection Development, Information Seeking Behaviour, Library Management, Preservation , Web Resources (4), and so on**. (Annexure 2).**

There is found to be a limitation of the study areas in LIS field carried out by the scholars. Continuous growth and development of LIS field has made the subject more dynamic and research oriented. Sufficient scopes for undertaking new areas are in existence and the scholars are to search for those areas which can impact the LIS operations and services in more effective way.

On LIS Researchers

Scholars who pursued research for their doctoral degree in the DLISc, GU are from different organizations and worked/ working in different

capacities at different levels. Among them there are faculty members in LIS, Library professionals, both seniors and Juniors from University and College libraries, Special libraries including S & T Institutions, etc. Moreover, they are representing almost all North Eastern States and also outside North East. A number of Universities and Academic Departments are now headed by the PhD alumni of the DLISc, GU. **(Annexure 3)**

Conclusion

Research is a continuous process and identification of research area(s) are to be taken seriously in order to have impact of the study made for the future. In all, the research is expected to be a path finder for the study to be made in future study. "Research for the sake of research" should be avoided in order to bring dynamism to a discipline. Every researcher has the obligation in furthering the knowledge he/ she gathers from the study he/ she made. UGC has given sufficient stress to have quality research and the Gauhati University is also trying the make the research more meaningful and worthy; to a large extent it is successful also in putting the goal to reality. Still there are much to do and researchers from the discipline like LIS have to play proactive role in bringing research more accountable and useful for the present and for future.

References:

https://www.gauhati.ac.in/arts/library-and-information-science
http://shodhganga.inflibnet.ac.in/handle/10603/5442 searched on January 02, 2019

Annexure 1:

List of PhD awardees, DLISc, GU (Till 31st December, 2018)
As per forename of Scholars

1. A Takatemsu Imchen. A study of Public Library System as community information centres in Nagaland: Realities and challenges (Guide: Narendra Nath Sharma) 2006

2. A K Mandal. Citation pattern of doctorial dissertations in Physics submitted to the Gauhati University 1993-2000: A bibliometricstudy (Guide: Rajani Kanta Barman) 2013

3. Alaka Buragohain. Study of the socio cultural aspects of library support for non formal learning in Assam (Guide: Alaka Buragohain (independent)) 1996

4. Alok Kumar Pathak. Impact of information technology on the collection development in university libraries of Assam: A study (Guide: Narendra Lahkar) 2017

5. Anu Hazarika. A study on organization and services of Libraries in Research and training Programme in Financial Institutions of North East India (Guide: Narendra Lahkar) 2009

6. Apurba Jyoti Majumder. Use of web based resources in Engineering college libraries of Assam: An empirical study (Guide: Narendra Lahkar) 2014

7. Badan Barman. Web resources in Library and Information Science: A managerial approach (Guide: Narendra Lahkar) 2012

8. Barsa Rani Duorah. Job Analysis of Library Professionals in Science and Technology institutes of Assam: An evaluative study (Guide: Narendra Nath Sharma) 2016

9. Bhrigu Ram Bharali. Role of Special Libraries in Assam and its socio-economic impact on Societies: A study (Guide: Narendra Nath Sharma) 2000

10. Bhupendra Nath Sarma. Collection Development in the Libraries of Technical Institutes in Assam: A study in the context of emerging ICT (Guide: Rajani Kanta Barman) 2015

11. Bibhuti Choudhury. Information needs and information seeking behaviour of users in major Science and Technology Libraries of North East Region with special reference to Assam (Guide: Rajani Kanta Barman) 2005

12. Bijaya Roy. Use of library software packages in the libraries of Institutes of Higher Learning in Assam with reference to Serial control module: an evaluative study (Guide: Sanjay Kumar Singh) 2018

13. Bikika Laloo. Retrieving Information on the Socio Economic and Socio Cultural Conditions of North East India using different Internet Search Engine (Guide: Narendra Lahkar) 2008

14. Bina Medhi Lahkar. Earth Science periodicals collections in the three Universities of Assam: Their impact on research activities during 1988-98: A critical study (Guide: Alaka Buragohain) 2003

15. Birender Pal. Impact of INFLIBNET in the modernization of University Libraries in India with special reference to North Eastern Region (Guide: Rajani Kanta Barman) 2018

16. Dalimi Devi. Library Services in Paramedical Colleges in Assam: An analytical Study (Guide: Narendra Nath Sharma) 2015

17. Deepa Baruah. The factors competency development among the working library professionals of the university libraries of North East India: Challenges and realities (Guide: Narendra Nath Sharma) 2018

18. Dhrubajit Das. Document Description and their practices in University libraries in North East India: A study (Guide: Narendra Lahkar) 2007

19. Dipen Deka. Digital Resources Management with reference to Indian University Libraries (Guide: Narendra Lahkar) 2012

20. Gajendra Ballav Devchoudhury. Information support to social scientists in Social

21. Gauri Sankar Karmakar. Use of online Resources among Research Scholars in Social Sciences in University libraries of Assam: A study (Guide: Narendra Lahkar) 2013

22. Gautam Sarma. Prospects of using Open Source Library Management Software in College and University Libraries of Assam (Guide: Narendra Lahkar) 2016

23. Haricharan Das. Reflection of rural information in leading Newspaper of Assam: A critical study (Guide: Narendra Nath Sharma) 2007

24. Hemanta Kumar Barman. Feasibility of library software packages for library automation in Higher Educational Institutions of Assam: A Critical Study (Guide: Alaka Buragohain) 2007

25. Jyandeep Saikia. Impact of User Education on Academic Libraries in Assam: A study on Strategic management of resources and services (Guide: Rajani Kanta Barman) 2006

26. Jyotika Devi. Use of online reference sources in Engineering College Libraries of Assam: A study (Guide: Narendra Lahkar) 2016

27. Jyotirekha Bhattyacharya. A critical study on digital archiving of Newspapers in India to develop a model for Assam (Guide: Sanjay Kumar Singh) 2016

28. Kankana Baishya. Management of Indian Institutional Repositories: An evaluative study (Guide: Sanjay Kumar Singh) 2016

29. Kishore Kalita. Challenges and Realities of Children Libraries of Assam: an analytical study (Guide: Narendra Nath Sharma) 2017

30. Kishore Kumar Sarmah. Prospects of library marketing in North East India: A study (Guide: Narendra Lahkar) 2011

31. Kishore Sharma. Coverage of Information Technology in Special Libraries of Assam: its challenges with reference to organizational management (Guide: Sanjay Kumar Singh) 2015

32. Kukila Goswami. Motivating library and Information Science (LIS) professionals in Engineering college and Institute Libraries of Assam for qualitative development (Guide: Rajani Kanta Barman) 2018

33. M Maltesh Ningaya. Buddhist Manuscripts with special reference to Arunachal Pradesh: Utilization, Restoration, Digitization (Guide: Narendra Lahkar) 2010

34. M D Syiem. A study of the trends of growth of Agricultural literature in North Eastern Region from 1976 to 1996 and its impact upon higher studies in Agricultural Science (Guide: Alaka Buragohain) 2005

35. Mehtab Hussein. Public Libraries in a multicultural society and their role in promoting social harmony: A critical study with reference to Assam (Guide: Narendra Nath Sharma) 2009

36. Mukut Sarma. Prospects of application of information technology in Academic Libraries of Assam: A Study (Guide: Alaka Buragohain) 2008

37. Nabajyoti Das. Deviance in Academic Libraries: A sociological study with reference to Assam (Guide: Narendra Nath Sharma) 2009

38. Nabin Chandra Dey. Prospects of consortia based resources among the Agricultural Universities in North East India with special reference to Central Agricultural University, Imphal (Guide: Sanjay Kumar Singh) 2017

39. Narendra Lahkar. Prospects of Automated Cataloguing in the three University Libraries of Assam: Based on users' satisfaction under major catalogue codes (Guide: Alaka Buragohain) 1998

40. Nikhil Hazarika. Job satisfaction of University Library professionals in Assam: A critical analysis (Guide: Rajani Kanta Barman) 2017

41. Niraj Barua. Prospects of human resource development in the libraries of Institutions of Higher Education in North East India with special reference to library automation: A critical study (Guide: Rajani Kanta Barman) 2011

42. Nirmal Ranjan Mazumdar. Management of Manuscript Collection of Assam in Digital Era: A practical approach using ICT tools (Guide: Sanjay Kumar Singh) 2016

43. Pallavi Gogoi. Documentation of Information Resources in Women's Studies Centres of India with special reference to North East India (Guide: Narendra Nath Sharma) 2013

44. Pranab Kumar Barooah. A model system for evaluation of the resources of a Special Library on the basis of user satisfaction using bibliometric techniques: A case study at Regional research Laboratory (Guide: Narendra Nath Sharma) 2004

45. Prasanta Kumar Deka. Prospects of coordinating Sarba Siksa Abhijan and Rural Libraries for social development in Assam with special reference to Kamrup District

46. Rajani Kanta Barman. Personnel management in University Libraries of N E India with special reference to Assam (Guide: Niru Hazarika) 1991

47. Rajib Kumar Das. The effectiveness of Continuing Education Programme vis a vis in-service training for LIS Professionals: A study of University Libraries of North East India (Guide: Narendra Nath Sharma) 2018

48. Ramvir Singh Yadav. Impact of Academic Libraries in development of human resources with special reference to Arunachal Pradesh and Nagaland (Colleges and Universities) 1971 to 1999 (Guide: Alaka Buragohain) 2008

49. Ranjan Jyoti Sarmah. The role of Library Professional for effective use of library resources in the present context: A study with reference to University Libraries of Assam (Guide: Narendra Nath Sharma) 2014

50. Ranjit Kumar Rajbongshi. Strategic capacity planning for hybrid library environment (Guide: Sanjay Kumar Singh) 2017

51. Rumi Das. Management of E-resources in the Health Science libraries of Assam: An analytical study (Guide: Sanjay Kumar Singh) 2018

52. S Kannan. Public Library System in Bhutan: A systematic approach for future developments (Guide: Narendra Lahkar) 2009

53. Sadananda Nath. College Library effectiveness study with special reference to the Tinsukia and Dibrugarh Districts (Guide: Narendra Nath Sharma) 2017

54. Sanatan Deka. The working and functioning of the Assam Legislative Assembly Library and its use and impact on legislators and administrators: A critical study (Guide: Narendra Nath Sharma) 2014

55. Sanjay Kumar Barman. Audio Visual materials and their management and preservation in Television Media Organizations: A case study of their library of Guwahati Doordarshan Kendra (Guide: Alaka Buragohain) 2013

56. Sanjay Kumar Singh. A study of impact of information technology on the effective management of library operations with special reference to Assam (Guide: Alaka Buragohain) 2005

57. Sanjib Kumar Deka. Search Engines and their search performance in retrieving Internet Resources: An evaluative study (Guide: Narendra Lahkar) 2009

58. Sarita Bhattacharjee. Information seeking Behaviour of Degree students of general Colleges of Barak Valley (Guide: Narendra Nath Sharma) 2010

59. Sharmila Bose. Evaluation of University Library websites of West Bengal: A study from Librarians' perspective (Guide: Narendra Lahkar) 2017

60. Shashilemla Ao. A study on growth and development of literature in Naga Languages (Guide: Narendra Lahkar) 2012

61. Smriti Rekha Baruah. A critical study of growth of Tea Literature with special reference to India from 1970-2002 (Guide: Alaka Buragohain) 2008

62. Sumana Chakraborty. Use of internet service in the University Libraries of Assam: An evaluative study (Guide: Alaka Buragohain) 2010

63. Tanmoy Sabhapandit. Growth and development of University Libraries in Assam in the context of Ranganathan's Fifth law of Library Science in IT Environment (Guide: Rajani Kanta Barman) 2018

64. Tarini Dev Goswami. Growth of research output in Science and Technology Institutes in Assam and the role of Libraries (Guide: Narendra Lahkar) 2013

65. Tilak Hazarika. Documentation Works and services of forestry Literature of Indian Council Forestry Research and Education (ICFRE): A study (Guide: Narendra Lahkar) 2004

66. Utpal Das. A critical study of preservation techniques for Sanchi Manuscripts of Assam (Guide: Alaka Buragohain) 2015

67. Utpal Sarma. Information needs and information seeking behaviour of urban community and their satisfaction by Public Library system: A case study in Guwahati (Guide: Alaka Buragohain) 2013

68. Vijay Anand. Designing of an e-learning model for supplementing LIS Education Programme (Guide: Rajani Kanta Barman) 2016

69. Vijay Raghav Tiwari. Role of Public Libraries in the development of adult education of Arunachal Pradesh with special view on Papumpare district: An analytical approach (Guide: Narendra Nath Sharma) 2006

70. Wakidur Rahman. Historical development of legal literature on customary laws of Assam: A critical study (Guide: Alaka Buragohain) 2003

71. Zabeen Ahmed. LIS education in the Universities of India: A study on the course contents with reference to universities of NE India (Guide: Narendra Lahkar) 2016

Note: As on January 02, 2019, of the total theses 4808 uploaded from GU, there are 46 theses of Library and Information Science. (http://shodhganga.inflibnet.ac.in/handle/10603/5442)

Annexure 2:
Keywords
(Number of appearance in all 71 theses)

Assam (25)
University Library (17)
NE India (14)
Public Library (9)

Six each

Academic Library
IT

Five Each

HRD
Special Library

Four each

Collection Development
Information Seeking Behaviour
Library Management
Preservation
Web Resources

Three Each

Arunachal Pradesh
College Library
Engineering College
ILMS
India
Library Automation
Library Resources
S&T Institutes
Search Engines
Social Science

Two Each

Agricultural Science
Automated Cataloguing
Bibliometric study
Buddhist Manuscripts
Competency development
Continuing Education Digital Archiving
Document Description
Documentation
Documentation works
DRM
Earth Science Periodicals
E-Learning
E-Resource Management
Guwahati
Hybrid library
INFLIBNET
Information Retrieval
Institutional Repository
Internet Services
Job Satisfaction
Legal Literature
Library Consortia
Library Marketing
Library Services
LIS Courses
LIS Education
LIS Professional
Manuscripts
Motivation
Multi Cultural Society
Naga Literature
Nagaland
Online Reference Sources
Online Resources
Open Source LMS
Research Output
Rural Information
Rural Library
Socio culture
Socio Economic

User Education

One each

Adult Education
Agricultural Literature
Agricultural University
Assam Legislative Assembly Library
AV Materials
Bhutan
Bibliometrics
Children Library
Citation Pattern
Community Information Centres
Customary Laws
Dibrugargh
Digital era
Digitization
Financial Institutes
Five Laws
Forestry literature
Gauhati University
Health Sciences
Higher Education
House keeping
ICFRE
ICT
ICT tools
Information
Information support
Internet Resources
Job Analysis
Kamrup
Legislator
Library development
Library Websites
Media Archives
RRL
Newspapers
Non formal learning
Paramedical Colleges
Personal Management
Planning
S&T Library
Sanchi Manuscript
Serial control
Sociological Study
SR Ranganathan
Tea Literature
Technical Institutes
Television Media
Tinsukia
Urban Community
West Bengal
Women Studies

Annexure 3:
PhD awardees: Surname first
(With SlNo in Awarded list: Annexure 1)

Ahmed, Zabeen 71
Anand, Vijay 68
Ao, Shashilemla 60
Baishya, Kankana 28
Barman, Badan 07
Barman, Hemanta Kumar 24
Barman, Rajani Kanta 46
Barman, Sanjay Kumar 55
Barooah, Pranab Kumar 44
Barua, Niraj 41
Baruah, Deepa 17
Baruah, Smriti Rekha 61
Bharali, Bhrigu Ram 09
Bhattacharjee, Sarita 58
Bhattyacharya, Jyotirekha 27
Bose, Sharmila 59
Buragohain, Alaka 03
Chakraborty, Sumana 62
Choudhury, Bibhuti 11
Das, Dhrubajit 18
Das, Haricharan 23
Das, Nabajyoti 37
Das, Rajib Kumar 47
Das, Rumi 51
Das, Utpal 66
Deka, Dipen 19
Deka, Prasanta Kumar 45
Deka, Sanatan 54
Deka, Sanjib Kumar 57
Devchoudhury, Gajendra Ballav 20
Devi, Dalimi 16
Devi, Jyotika 26
Dey, Nabin Chandra 38
Duorah, Barsa Rani 08
Gogoi, Pallavi 43

Goswami, Kukila 32
Goswami, Tarini Dev 64
Hazarika, Anu 05
Hazarika, Nikhil 40
Hazarika, Tilak 65
Hussein, Mehtab 35
Imchen, A Takatemsu 01
Kalita, Kishore 29
Kannan, S 52
Karmakar, Gauri Sankar 21
Lahkar, Bina Medhi 14
Lahkar, Narendra 39
Laloo, Bikika 13
Majumder, Apurba Jyoti 06
Mandal, A K 02
Mazumdar, Nirmal Ranjan 42
Nath, Sadananda 53
Ningaya, M Maltesh 33
Pal, Birender 15
Pathak, Alok Kumar 04
Rahman, Wakidur 70
Rajbongshi, Ranjit Kumar 50
Roy, Bijaya 12
Sabhapandit, Tanmoy 63
Saikia, Jyandeep 25
Sarma, Bhupendra Nath 10
Sarma, Gautam 22
Sarma, Mukut 36
Sarma, Utpal 67
Sarmah, Kishore Kumar 30
Sarmah, Ranjan Jyoti 49
Sharma, Kishore 31
Singh, Sanjay Kumar 56
Syiem, M D 34
Tiwari, Vijay Raghav 69
Yadav, Ramvir Singh 48

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LIS research in Mizoram

R. K. Ngurtinkhuma

Introduction

Mizoram is the 23rd states of India lying in the southernmostpart of the North-East India having 21081 Sq.Km in area; bordering Assam and Manipur state in the North, Myanmar in the East and South with 404Km international border and Bangladesh in the West with 318Km international border andTripura. The state is administered in eight(8) districts with Aizawl as the state capital. According to 2011 census, the total population is 10,97,206 with 91.33% literacy. Common language is Mizo, English and Hindi.

Mizoram is previously known as Lushai Hills under the British administration and became under the administrative control of the Chief Commissioner of Assam with effect from1st April 1898. In 1954, it was named as Mizo Districtby an act of Parliament and given a District Council as provided in the 'Sixth Schedule'of the Constitution of India. It was elevated into the status of Union Territory on 21st January 1972 and statehood on 20th February 1987naming as 'Mizoram'by the Government of India.

Education in Mizoram

In 1894, two British Missionaries, Dr.F.W.Savidge and Mr. J.H.Lorrain, known among the Mizo as Sapupa and Pu Buanga respectively arrived in Mizoram, devised Mizo Consonant in the form of Roman script and established school in Aizawl.Subsequently,according to Lianzawna

(1996), schools had been established in different villages and as a result of their tremendous contributions and developmental works, the Assam Government handed over school administration and inspection in Mizoram to the Christian Missionaries from 1904 to 1952. As time passed and education flourished in Mizoram, the first college was established under the initiatives of the Missionaries in 1958 at Aizawl under the name of Aijal College (now, Pachhunga University College).As of now there are 32 colleges and two universities in Mizoram, namely, Mizoram University (Central University) establish by an Act of Parliament in 2000 and ICFAI Mizoram University (private) in 2006.

North Eastern Hill University (NEHU) opened its campus in Aizawl and was taken over by Mizoram University with all the assets and liabilities. There are 33functioning academic departments at present. In 2002, Mizoram University opened new academic departments including Library & Information Science hence LIS education in Mizoram was formally started. At present, three programmes are running in the department by seven regular faculty members in the department with doctoral degree.

LIS Education in Mizoram

Library and information science education is being witnessed in India for more than a hundred years since W.A.Borden started a library school at Baroda in 1911. There are more than fifty universities in India currently offering LIS education on various programmes. Library & Information Science education is not much aware among the people of Mizoram and before the opening of the department in Mizoram University, graduate in the field are very few among the Mizo. The opening of the department in Mizoram University is the turning point for Mizo to be aware of the discipline. Hence, LIS Education in Mizoram was very recent and it can be described briefly as below:

Certificate Course: The first Library &Information Science (LIS) education was one time four-month Certificate Course organised at Aizawl by The Mizoram Library Association in collaboration with the Department of Art & Culture, Government of Mizoram during August to December 1997. Classes were held at the Hrangbana College building at eveningto cater the need of present library professionals within the state. Out of 24 admitted students, 20 students successfully completed the course and was

subsequently recognized and approved by the North Eastern Hill University, Shillong.

Undergraduate Programme: In 2002, one-year course of Undergraduate Programme in Library & Information Science (BLIS) was formally started in Mizoram University. The department was function in a rented building with single handed faculty staff on contractual basis. Although the programme continued for two years only 24 students completed the programme successfully.

Post-Graduate Programme: In 2003, one-year Post-Graduate Programme in Library and Information Science (MLIS) was started in Mizoram University for BLIS Degree holders. Subsequently, two-year Post-Graduate Integrated MLIS programme came into effect from 2004 superseding the previous programmes and 225 students completed the course successfullytill date. The programme follows Choice Based Credit System (CBCS) since 2012 as per UGC guidelines.

MPhil Programme: MPhil programme in Library & Information Science was commenced in 2007 with five students at Mizoram University to became the first University in North East India to start MPhil Programme. Curriculum is designed to cope up with the emerging issues in the field and 48 scholars have been awarded the degree of MPhil till date. Thrush areas for dissertation workare:

1) Evaluation of Library and Information Systems and Services: Case studies.

2) Evaluation of Library and Information Science Education and Practice.

3) Management of Library and Information Systems.

4) Design and Development of Library Automation, Networking and Digitization.

5) Design, Development, Maintenance of Library Website.

6) Evaluation of Search Engines.

7) Evaluation of Internet Resources.

8) Any other Emerging Areas.

PhD Programme: PhD programme in Library & Information Science was commenced in 2005 at Mizoram University. As per UGC regulations, course work has been conducted since 2009 with three theoretical courses/

papers. There are seven eligible supervisors for the programme and 25 scholars has been awarded the degree of PhD till date.

Research in LIS

According to Cambridge dictionary1, research is "to study a subject in detail, especially in order to discover new information or reach a new understanding". Oxford dictionary2also define research as "The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions". By analysing these two definitions, research is to investigate the subject in detail to establish new information and reach new conclusion with the help of relevant materials and sources. Therefore, research plays important role in education and society for best result in every aspect. Maurya, et.al. (2018) stated importance of research as, "The outcomes of research act as a vehicle for future researchers in the concerned field for further growth of the discipline and also have a reflective impact for imparting quality education".

Research is basically carried out in higher institutions and development organisations. It can be traced back 1920s that according to Shera (1976), research in library science was carried out in the Library School of the University of Chicago. In India, according to Chandrashekhara and Ramasesh (2009), education and research in library science was incredibly started by Dr. S.R.Ranganathan and they stated that "In 1951, he started providing Library science education at the University of Delhi, surmounting many difficulties and facing personal ridicule. The University of Delhi awarded the first *de jure* degree in library science in 1957 to D.B. Krishan Rao who worked on 'faceted classification for agriculture'. Doctoral research remained in the wilderness when Ranganathan shook the Delhi soil off his feet in 1955".Kannappanavar and Vijayakumar (2000) stated the need of LIS research as "Research at advanced level is very essential for the progress or advancement of LIS as adiscipline".

In Mizoram, LIS research leading to doctoral degree is carried out only under the department of Library &Information Science, Mizoram University.It is one of the five universities in North-East India conducting LIS education and research. Mizoram University being a Central University, is having qualified and state-of-the-art infrastructure for LIS education and research. The university authority has been taken efforts to equip the

department to meet the emerging challenges providing resources and equipment in the field.

Scope of Study

The study is limited to research activities and its result in a specific subject of Library & Information Science. Research is basically carried out in higher education institutions and as such this study is confined to Mizoram University department of Library & Information Science during 2005 to 2018.

Objectives

1) To ascertain growth of LIS research activitiesin Mizoram.
2) To identify most thrash areas in the field of LIS research.
3) To ascertain supervision of scholars in LIS by faculty

Methodology

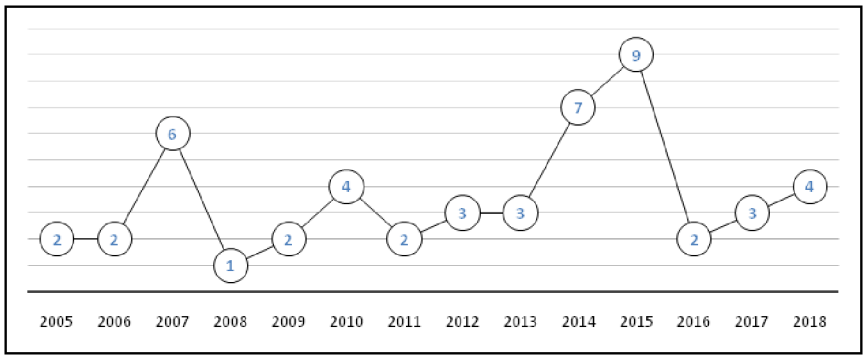
The present study is conducted to know the position of LIS research in Mizoram. Data were collected from various records of primary and secondary data of Mizoram University. Data were arranged in table to show clarity and interpreted to draw the result. It is also discussed to deliver correct result for the readers.

Discussion and Result

Data collected from different sources are tabulated, discussed and interpreted to draw inferences. It is very important in technical writing to formulate and discuss the materials, as such the result is also draw at below:

Research underPhD Programme: PhD Programme in the field of LIS was opened in 2005 at Mizoram University and two scholars were admitted in the year as there is only one supervisor. With the increase of eligible supervisor in the subject, number of scholars was also increased and so far, 50 scholars were registered for PhD making an average of 7.14 scholars per supervisor and year-wise registration may be reflected as below:

Graph 1: Year-wise registration for PhD



Growth of Research (PhD Awarded):The first PhD Degree in LIS awarded by Mizoram University was notified in 2008. During the last eleven years 25 scholars were awarded PhD Degree in the field of LIS by Mizoram University. The following table shows number of doctoral degrees awarded in the field of LIS by Mizoram University during the last eleven years, i.e. 2008-2018. During this year an average of 2.27 theses were awarded doctoral degree. Doctoral degree award is highest in 2018 constituting 32% and none of the scholars were awarded in 2015 and 12% each were awarded doctoral degree in 2010, 2013 and 2016.

Table 1: Year-wise awarded of PhD Degree

Year	*PhD Awarded*	*Percentage*
2008	1	4
2009	1	1
2010	3	12
2011	2	8
2012	1	4
2013	3	12
2014	1	4
2015	0	0
2016	3	12
2017	2	8
2018	8	32
Total	**25**	**100**

Source: Survey data

Area of Research (PhD): Area of PhD research is presented in Table 2 below. Maximum area of research is under user study constituting 8 (16%) from the total number of registered scholars followed by e-Resources by 5(10%) and Bibliometrics 4(8%) in the third position. Top three area of research is followed by Content Analysis, Information Literacy, Library Consortia and Social Networking constituting 3(6%) each and Collection Development, ICT Application, Library Service and Webometrics having 2(4%) each and lastly by Academic Library, Citation Analysis, Human Resource Development, Information Management, Information System, Institutional repository, Job Satisfaction, Library Automation, Library Networking, LIS Education, Public Library, Resource Mobilisation and Scientometrics having 1(2%) each making average of 2.08.

Table 2: Area of PhD Research in LIS

Sl.No	*Area of Research*	*No. of Registered PhD Scholars*	*Percentage*
1	Academic library	1	2
2	Bibliometrics	4	8
3	Citation Analysis	1	2
4	Collection Development	2	4
5	Content analysis	3	6
6	e-Resources	5	10
7	Human Resource Development	1	2
8	ICT Application	2	4
9	Information Literacy	3	6
10	InformationManagement	1	2
11	Information System	1	2
12	Institutional Repository	1	2
13	Job Satisfaction	1	2
14	Library Automation	1	2
15	Library Consortium	3	6
16	Library Networking	1	2
17	Library Service	2	4
18	LIS Education	1	2
19	Public Library	1	2
20	Resource Mobilization	1	2
21	Scientometrics	1	2
22	Social Networking	3	6
23	User Study	8	16
24	Webometrics	2	4
	Total	**50**	**100**

Source: Survey data

Research under MPhil Programme:

Since the beginning of MPhil Programme in library & information science at Mizoram University, 55 scholars have been registered and 48 were awarded MPhil Degree under the supervision of 7 eligible teachers. The average guidance of scholars is 7.85 per teacher.

Year-wise awarded of MPhil Degree: The first MPhil Degree in library & information science was awarded by Mizoram University in 2009. During the last 10 years an average award of MPhil in LIS is 4.8 per year which is less than the intake capacity as a result of some scholars are continuing the programme. In 2015, 7(14.58%) scholars were awarded MPhil Degree being the highest and followed by 6(12.5%) each in 2016 and 2017. In 2012, 2013 and 2018, the degree was also awarded to 5(10.41%) each. The number of MPhil degree holders per year is presented in the following Table.

Table 3: Year-wise growth of MPhil Degree in LIS

Year	*MPhil Awarded*	*Percentage*
2009	3	6.25
2010	4	8.33
2011	3	6.25
2012	5	10.41
2013	5	10.41
2014	4	8.33
2015	7	14.58
2016	6	12.5
2017	6	12.5
2018	5	10.41
Total	**48**	**100**

Source: Survey data

Area of MPhil Research: MPhil scholars are mostly worked under 19 research areas in LIS. Out of 55 registered scholars, 14(25.45%) worked under User Education forming the highest which is more than one-fourth of the total scholars and followed by Collection Development 7(12.72%) and Bibliometrics 5(9.09%) in the second and third. Other areas are e-Resources 4(7.27%), ICT Application, Library Automation and Library Consortium 3(5.45%) each, Content Analysis, Public Library, Social Networking and Webometrics 2(3.63%) each and Academic Library, Information Literacy, Institutional repository, Library Service, LIS Education, Preservation and Scientometrics 1(1.81%) each. The following table will show the data of area of MPhil research in LIS:

Table 4: Area of MPhil Research in LIS

Area of Research	*No. of Registered MPhil Scholars*	*Percentage*
Academic Library	1	1.81
Bibliometrics	5	9.09
Citation Analysis	1	1.81
Collection Development	7	12.72
Content Analysis	2	3.63
e-Resources	4	7.27
ICT Application	3	5.45
Information Literacy	1	1.81
Institutional Repository	1	1.81
Library Automation	3	5.45
Library Consortium	3	5.45
Library Service	1	1.81
LIS Education	1	1.81
Preservation	1	1.81
Public Library	2	3.63
Scientometrics	1	1.81
Social Networking	2	3.63
User Study	14	25.45
Webometrics	2	3.63
Total	**55**	**100**

Source: Survey data

Supervision of Research Scholars: In Mizoram University, MPhil supervision is eligible by any permanent faculty having doctoral degree, but PhD guidance is restricted until 2017 to permanent faculty competing three years after doctoral degree is awarded. Due to UGC regulations for PhD and MPhil guidance there cannot be equal number of research guidance to faculty members. Pravakar Rath has most registered PhD scholars and R. N. Mishra for MPhil scholars. Subsequently, most awarded PhD degree was under the supervision of Pravakar Rath and MPhil degree under R. N. Mishra. The following table shows research guidance in LIS discipline at Mizoram University.

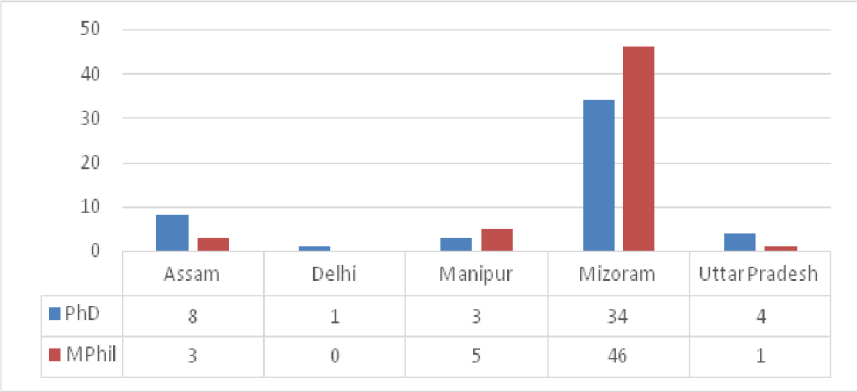
Table 5: Supervision of Research Scholars in LIS

Name of Supervisor	*PhD Scholars*		*MPhil Scholars*	
	Registered	*Awarded*	*Registered*	*Awarded*
Akhandanand Shukla	4	1	8	7
Amit Kumar	-	-	1	-
Lalngaizuali	1	-	4	3
M. K. Verma	6	3	6	6
PravakarRath	12	9	6	5
R. K. Ngurtinkhuma	10	1	10	9
R. N. Mishra	11	5	12	12
S. N. Singh	10	7	8	3
S. Ravikumar	-	-	1	1

Source: Survey data

State-wise Registration in Research

Scholars from other states are also registered to pursue research in the field. In PhD programme, 34(68%) are form the state of Mizoram, 8(16%) from Assam, 4(8%) from Uttar Pradesh, 3(6%) from Manipur and 1(2%) from Delhi. In MPhil programme, 46(83.63%) are from the state of Mizoram, 5(9.09%) from Manipur, 3(5.45%) from Assam and 1(1.81%) from Uttar Pradesh. This data is presented by graph as below:



Graph 2: State-wise registration in LIS research

Conclusion

The department of Library & Information Science,Mizoram University has been conducting thirteen years of research and produced good number of scholars in the field. Research provides deep knowledge and experience in the field to strengthen confidence to the scholar in a particular area. The study concludes that scholars in LIS research has to work more in certain areas to cope up with the changing information scenario of the world. Completion of research is not the end, but to start new area of study to meet challenges ahead in the same or other area.

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Importance of LIS educated person in rural libraries

Nilakshi Sharma

Introduction: Libraries are gateways of knowledge. A Library plays a vital role in the society. A Public Library is a social institution open for all without any discrimination for free diffusion of knowledge and information in the community. Most of the Public Libraries are being established to serve the residents of the community where it is located. As compared to special and academic libraries it has the most heterogeneous users as there is no restriction to who can use it. Door of public library must be open for free and equal use by all members of the community regardless of race, color, nationality, age, sex, religion, status, education etc. Rural libraries are also public library which is a learning center where people can take part in learning activities, discuss and share knowledge and information. The main function of public Library is to provide Information contained in books, newspapers, magazines, journals etc. to users according to their needs. Public library also provides provision for recreation and relaxation. And most importantly Public library preserves the local heritages of a community. There are some problems like inadequate funding, training and retraining of staff, Illiteracy rate of the citizens, outdated and irrelevant collections of the public Libraries and lack of recognition on the part of government to know the importance of Libraries to economic, social, educational and national development of the country. The public library is positioned to provide and promote access to information which will translate to development of the society. The public library is the local center of

information, making all kinds of knowledge and information readily available to its users.

Main Objectives of rural library:

The rural libraries are set up in the community to serve the information and recreational needs of its user. The main objectives of a rural library are as follows:

* To provide up-to-date and authentic information to the members.

* Another objective is to provide services free of cost to each member of the society without any discrimination.

* Rural library work as a recreational center, where members can make a harmless and productive use of leisure.

* Rural libraries are responsible for preservation and development of cultural heritage of the community.

Functions of rural library:

A public library performs different functions in the society to achieve its objectives. These are some functions perform by a rural library in the society:

* Information Dissemination Center of the respective community.
* Life Long Learning Center of the society.
* Community's Intellectual Center.
* Recreation Center for its users.
* Community's Culture Preservation Center.
* Also work as Instrument of Social Change.

Importance of rural Library

All the above mentioned objectives and functions of a rural library describe the importance and role of rural library in the society. The following are some points which explain the importance of rural library in details.

* Rural library helps in creating and strengthening reading habits in children from an early age since they started visiting the rural libraries from very young age.
* Rural library can support both individual and self-conducted education as well as formal education by providing accurate materials to its users.

* Rural library provide opportunities for personal creative development.

* Rural library helps in stimulating the imagination and creativity level of children and young people.

* Better management of a rural library can help in promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations among the community members.

* Rural library can maintain the balance among the different culture by fostering inter-cultural dialogue and favouring cultural diversity.

* It supports the oral tradition.

* It ensures access to all community information.

* Proper maintenance of library resources can provide adequate information services to local enterprises, associations and interest groups.

* Some of the developed libraries can facilitate the development of information and computer literacy skills.

* Some libraries organise different programs like literacy activities, where members from different age groups can participate.

Literature review: Different literatures have been found in this area which states the vital role played by libraries in rural areas. Uhegbu (2001) discusses the barriers to rural information services for community development. An emphasize was given on the nature and characteristics of a community as well as community information needs and services. Four components of community information were identified in this paper. These are information itself, the sender, the medium or channel of communication and the final consumer. Kaula (2006) in a paper states

that, the projection of Indian Culture and movement for the development of public library activities through the efforts of Iyyanki venkata rammanayya is followed by the work of Dr S R Ranganathan involves rural India. In this paper a discussion was made about launching of the National Adult Education Program and the follow up the program for the establishment of village libraries in several states through different agencies along with National policy and assistance of Raja Rammohun Roy Library Foundation. Nyana (2009) in this paper an attempt was made to reflect different problems facing African libraries in the provision of information and services to rural communities. Again, this paper suggests a library system that is

sustainable for the oral tradition. Krishnamurthy (2012) and others' study reveals the importance of rural libraries in the development of rural areas by giving emphasis on the changing trend of the society. The paper also mentions about special programs of the government for development enhancement of the quality of life in the rural areas of the Karnataka State. It highlights the role of Community Information Centers or Rural Libraries for the Development of Community. Behera & Parida (2014) study covers basic information about library consciousness, status, facilities in rural areas of the different communities. The study was made to find out reasons for not using the libraries by the community members. The aim of this study was to find out benefit gained by different community members in day to day life from the rural libraries. Shahade (2014) in a paper states that only the public libraries can perform the role as an institution of lifelong learning. The Public libraries have recognized their role to satisfy information needs of all types of people in the society. The National mission on libraries setup by ministry of culture has provided recommendations for development of libraries and information centers to make public libraries equipped with information.

Objectives of the study: To carry out this study successfully, some of the well- defined objectives were formulated. These are as follows:

* To find out importance of libraries in rural areas.
* To find out different heritages maintained by the rural libraries.
* To find out the present conditions of library management.
* To find out different problem faced by the library management committee in smooth running of the library.
* To draw an outline about the importance of LIS educated persons in management of rural libraries.

Methodology: In this study, interview method; personal observation and literature review were adopted to collect various data which can meet the requirements of all the objectives that have stated. At first some of the existing literatures on different topics were consulted to gain some depth information about the topic. After that some of the questions were formulated to ask at the time of interaction with the person in charge and other members of all the libraries to collect required data for this study. Some of libraries were visited personally and tried to gather some of the data like condition of

library building and other infrastructures like, reading space, book stack, types of documents, etc. The data obtained through various methods are tabulated, analyzed and interpreted according to the responses sought by the respondents.

Limitations of the study: The main objective of this study was to gather some information about the importance of LIS educated persons in management of rural libraries with reference to Darrang districts of Assam. The study covers different issues related to management of rural libraries like activities conducted by rural libraries, importance of rural libraries in the society, preservative method used for preservation of local heritage, present management committees, problems faced by the libraries, etc. To collect all the above mentioned information, a survey was conducted among the different rural libraries of Darrang district. A total number twenty libraries were considered as study population and most of the libraries have visited personally. An interaction was made with the person in charge, library committee or other members of the library. The study was totally dependent on respondent of different libraries that have been surveyed. The geographical scope of this study is limited only to twenty (20) rural libraries from different villages among the total 563 villages of Darrang districts of Assam.

Responses were almost satisfactory. Some of the rural libraries are left out from the study because of communication problems and remoteness.

Analysis of data:

Total number of library visited:

The study covers 20 rural libraries of Darrang districts of Assam. All the libraries that have visited belong to different villages of Darrang. Some of other rural libraries were also there, but since most of the records were not found, and some of the libraries were not working nowadays due to poor management, all those libraries were not included in the study population. Almost 30% libraries of the research population were established before 1950. Only 1 library among these 20 libraries is going to organize diamond jubilee celebration in this year.

Condition of library building:

A proper library building is the primary factor that must be maintained well. Well maintenance of library building can attract its users. During the study, it came into notice that only 15% that means only 3 libraries have proper library building according to the members of library and condition of rest of the library building is very poor. Due to the proper maintenance, library buildings are getting damaged.

Availability of resources:

A library is nothing without its resources. This study reveals that 20% of libraries have more than 1500 resources, 40% libraries have more than 1000 resources, 30% libraries have more than 500 resources and only 10% libraries have more than 100 resources.

Types of resources:

It was very important to ask about the types of library collection to bring into focus about the importance of rural libraries. All the 20 libraries have general collections of books of different fields including novels, biography etc. Only 10% libraries have a collection manuscripts, which were came from donations. 100%

libraries have a collection of magazines which includes career guidance magazines, other local magazines of different institutions also. Only 5 libraries kept daily Assamese newspaper in the library. And 15% libraries have other collections like religious books, local rural medicine related books, agriculture related books and other local publications.

Methods used to preserve resources:

Only 20% libraries i.e. 4 libraries have taken steps for preservation of damaged resources. They bind the damage resources, so that future generation can also use the same resources. And other 16% libraries are not taking any steps for preservation of resources.

Total number of users:

Total numbers of registered users of 15% libraries are more than 500. 40% libraries have more than 200 registered users, 35% libraries have more than 100 users and rest 10% libraries have more than 50 users.

Types of user: All the libraries have different types of users. All the libraries have users related to different fields like religious fields, persons related to literature field, person related to different social activities also use library. Even if all the library provide their services to each and every member of the society, irrespective of gender, age, social status etc. but in comparison to working women, non-working women's come less to the library. And in comparison to working man, less number of non-working man come to library. Other than these, retired professionals also come to library. Students are regular users of all the libraries. Only 4 libraries have some researchers as registered members.

Queries of users:

Since the users are from different backgrounds, theirs queries also varies. In all the libraries, generally users come to issue novels, short stories or other

literatures. In all the libraries, generally students come to consult career related books and magazines. In 10% libraries, there are some users who search for manuscripts, some religious books etc. In 35% libraries, people from different backgrounds like agriculture, religious fields comes with different queries and their staff tries to fulfill their needs as per their capacity.

Space for reading room:

Study reveals that 45%libraries have reading space itself in the library and rest 55% libraries don't have reading space.

Library committee:

All the libraries have library committee to manage the library. Even if they don't have special library management committee, the library is maintained by the "Sanga" committee.

Library committee contains LIS educated persons:

Only 1 library have LIS educated person in their library committee.

Availability of LIS educated library staff:

All the library have their library staff, but no library has LIS educated staff. The present staff keeps all the record of total resources available, resources on issue etc. in written form in registers.

If library staff gets remuneration:

Only 30% libraries give remuneration to their staff. Even if they are paid, but the amount of their salary is very less. So, they are not satisfied with their jobs. Other 70% libraries don't pay their staff.

Special training for staff:

Only 10% libraries were giving some special training to their staff, but those training were not formally given hands on training. The training was conducted

by the committee, a lecture was given. The trainings were all about maintenance of books and records in the library and these training were given by some of the well-known persons of the locality, who is related to academic field. Rest of 90% libraries has never given any training to their staff.

Other programs held on library:

45% libraries have organized other programs and other 55% have not conducted any programs yet. When the question was made about the types of programs that have conducted, 35% libraries i.e., 7 libraries have organized indoor recreational programs like creative writing competition, painting competition, chess competition etc. 3 libraries have conducted plantation program, 1 libraries have conducted orientation program on different skill development among women's, and only 1 library have conducted diamond jubilee in library itself.

How local peoples were benefited:

Responses of all the libraries were positive on this question. 60% libraries told that the library provide informational support to local peoples of different working fields like agriculture, literature, academic field, religious field etc. 100% libraries were provided educational support to the students

of their locality. All the 20 libraries were helping its members to use their free time in the library.

They told that kids and young generation comes to library in vacation and issue books from the library. Some retired professionals also come to library. Along with passing their free time with books, they also provide some valuable instruction to grow the library.45% libraries told that library helps to grow the reading habit among the local peoples. 65% libraries told that library is helping in building an educational environment in their society. And most of the members told that because of presence of the library in their locality, they get some weightage in the society.

Library fund:

All the 20 libraries get donation from different organization and persons, from where they maintain their library fund. 7 libraries get fund from some local NGO's. 3 libraries have received fund Raja Rammohun Roy Library Foundation and they have used these fund to procure books in the library. 20 libraries use their committee fund as their library fund. And only 25% libraries receives fund from other organization.

Problems faced during management of the library:

100% libraries are facing financial problem, which is becoming the major barrier of the development of the library.55% libraries facing proper maintenance problem. Due to lack of proper management, library resources are destroying day by day. 25% libraries facing problems like non-availability trained staff. 80% libraries of total population facing problems of misuse of library resources, and 30% library facing other problems like proper electricity supply, proper library building, lack of books etc.

Objective wise findings:

i) To find out importance of libraries in rural areas: Rural libraries are very essential part of a society. Most of the libraries responses were positive on this aspect. They said that the library provide informational support to local peoples of different working fields, educational support to the students of their locality. Libraries of different villages were helping its members to use their free time in the library. Kids and young generation comes to library in vacation and issue books from the library which helps to grow the reading

habit among them. Some retired professionals also come to library to pass their free time with books. Again, since different programs like indoor recreational activities, skill development programs etc. are organized by the library, it also develops their members. A rural library is the representative of different cultures of a society. A rural library can play a vital role in maintaining a healthy relation among different cultures. According to different responses, it can be conclude that library is helping in building an educational environment in their society and because of presence of the library in a locality ,that locality get some weightage in the society.

ii) To find out different heritages maintained by the rural libraries: Collection of a library is the main factor that attracts different peoples towards the library. More the valuable resources will be available in the library; more the users will come to make a positive use of it. Generally rural areas are rich in various historical and cultural heritages in our country. A rural society may have people of different cultures, and those different cultural people may have different heritages like manuscripts, some other religious books, books related to different cultures published from that locality, books related to some local medicines which are limited to the members of that society only. All these valuable resources are maintained by rural libraries. The survey reveals that all the 20 libraries have general collections of books of different fields including novels, biography etc. Only 10% libraries have a collection manuscripts, which were came from donations. 100% libraries have a collection of magazines which includes career guidance magazines, other local magazines of different organizations also and 15% libraries have other collections like religious books, local rural medicine related books, agriculture related books and other local publications.

iii) To find out the conditions of library management: The stability and development of a library is totally depending upon the proper management of the library and proper management includes various aspects like management of library resources, library infrastructures, coordination among library staff and committee, strong bond with its members, willpower to overcome obstacles etc. A proper library building is the primary factor that must be maintained well. During the study, it came into notice that only 15% libraries have proper library building according to the members of library and condition of rest of the library building is very poor. Study reveals

that 45%libraries have reading space itself in the library. This study reveals that 20% of libraries have more than 1500 resources, 80% libraries have less than it. Only 20% libraries have taken steps for preservation of damaged resources. Total numbers of registered users of 15% libraries are more than 500. Rest 85% libraries have less than 500 registered users. All the libraries have library committee to manage the library. All libraries have their library staff, but no library has LIS educated staff. Only 30% libraries give remuneration to their staff. Only 10% libraries were giving some special training to their staff, rest of 90% libraries has never given any training to their staff.45% libraries have organized other programs and other 55% have not conducted any programs yet.

All the 20 libraries get donation from different organization and persons, from where they maintain their library fund. 7 libraries get fund from some local NGO's. 3 libraries have received fund Raja Rammohun Roy Library Foundation. Libraries use their committee fund as their library fund. And only 25% libraries have received fund from other organization.

iv) To find out different problem faced by the library management committee in smooth running of the library: Financial problem and proper maintenance is the major barrier of the development of the library. Due to lack of proper maintenance, library resources are destroying day by day. Some libraries are facing problems like non-availability trained staff. There are some other problems like misuse of library resources, electricity problem, proper library building, lack of books etc.

v) To draw an outline about the importance of LIS educated persons in management of rural libraries: From all the above discussion it became clear that rural libraries are very essential part of a society, which helps personal development of individuals as well as development of the society. But all the libraries are facing different problems like financial problem, maintenance problem etc. Some of the rural libraries get financial assistance from different organizations like RRRLF, but due to lack of information about it, library don't get such type of financial help. Again, lack of proper maintenance create different problems like maintenance of valuable resources like manuscript, other valuable books etc. Since, the staff don't know preservation and maintenance methods, resources are damaging day by day. But LIS education covers a wide area of preservation

of library resources in its syllabus. So, it is not a very big issue for

LIS educated people to handle it with their knowledge. Now, it became clear that how libraries are facing problems, and how LIS educated people are important to overcome all these barriers.

Suggestions:

- **Proper management of libraries:** It was observed that management of libraries are not up-to-date. Some of the library resources are degrading day by day due to low maintenance. To bring proper management of the library, the library committee should contain a good number of LIS educated people. The management committee should be strong enough to survive with all the barriers.
- **Preservation method should be use:** It was observed that some of the libraries are losing their members due to poor condition of library materials. Valuable books are not properly maintained so that present and future generation can use it. Due to lack of awareness, members are making a rough use of documents, due to lack of proper record, some of documents are missing. All these issues should be taken seriously. Records should keep up to date. Binding or such other method should be bringing into action to preserve resources.
- **Collection of more heritages:** The management committee should try to collect more heritages from different organizations or individuals. So that all heritages can bring into focus of people.
- **Awareness among people about LIS education:** The study reveals various problems faced by the rural libraries, which can be limited or overcome by some LIS educated people. So, it is very important to bring awareness among the local people about the LIS education and its importance.

Conclusions:

Public libraries are primary institutions of basic learning which have a mission of providing collection and services to its users to meet informational needs of local

community. These serve as local gateway to knowledge and information and provide services like lifelong learning, which will help in independent decision making by an individual. Majority of population in India

lives in rural areas where new technologies are not within the reach of people, that is why a gap is emerging between information and information deprived community. The paper discuss different issues like problems of management, importance of LIS educated people in the rural libraries, cultural heritages available in libraries etc. This paper is concluded with some suggestions to bring awareness among local peoples about importance of LIS education, to use some preservation methods for the library resources.

However, it is very needed to conduct further studies in this area to bring various issues into focus.

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List of Tables:

Table 1: Condition of library building		
Responses	Frequency count	Percentage
Good	3	15%
Poor	17	85%

Table 2: Availability of resources		
Responses	Frequency count	Percentage
More than 1500	4	20%
More than 1000	8	40%
More than 500	6	30%
More than 100	2	10%

Table 3: Types of resources		
Responses	Frequency count	Percentage
Books	20	100%
Manuscripts	2	10%
Magazines	20	100%
Newspapers	5	25%
Other collections	3	15%

Table 4: Methods used by libraries to preserve resources		
Responses	Frequency count	Percentage
Yes	4	20%
No	16	80%

Table 5: Total number of users		
Responses	Frequency count	Percentage
More than 500	3	15%
More than 200	8	40%
More than 100	7	35%
More than 50	2	10%

Table 6: What they generally search for		
Responses	Frequency count	Percentage
Manuscript and other such resources	2	10%
Novels and Short story books	20	100%
Career related books	20	100%
Others	7	35%

Table 7: Space for reading room		
Responses	Frequency count	Percentage
Yes	9	45%
No	11	55%

Table 8: Library committee		
Responses	Frequency count	Percentage
Yes	20	100%
No	0	0%

Table 9: Presence of LIS educated person in library committee		
Responses	Frequency count	Percentage
Yes	1	5%
No	19	95%

Table 10: Availability of LIS educated library staff		
Responses	Frequency count	Percentage
Yes	0	0%
No	20	100%

Table 11: If library staff get remuneration		
Responses	Frequency count	Percentage
Yes	6	30%
No	14	70%

Table 12: Special training for staff		
Responses	Frequency count	Percentage
Yes	2	10%
No	18	90%

Table 13: Other programs held on library		
Responses	Frequency count	Percentage
Yes	9	45%
No	11	55%

Table 14: Types of program held		
Responses	Frequency count	Percentage
Indoor Recreational programs for kids	7	35%
Plantation	3	15%
Skill developmental programs	1	5%
Diamond jubilee celebration	1	5%

Table 15: How they are benefited		
Responses	Frequency count	Percentage
Informational support users of different working field	12	60%
Educational support to students	20	100%
Use of free time	20	100%
Growing reading habit of kids	9	45%
Educational environment	13	65%

Table 16: Fund receives from		
Responses	Frequency count	Percentage
Donation	20	100%
NGO's	7	35%
RRRLF	3	15%
Committee fund	20	100%
Others	5	25%

Table 17: Problems faced by libraries		
Responses	Frequency count	Percentage
Financial problem	20	100%
Proper maintenance problem	11	55%
Lack of trained staff	5	25%
Misuse of resources	16	80%
Others	6	30%

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College Library Movement in Assam: role of ACLA

Dhrubajit Das

Beginning of college library movement

Higher education in Assam specially the college education has started its journey in the year 1886 with the beginning of first year Arts classes at Gauhati Seminary (at present well known as Cotton Collegiate School) which was affiliated to Calcutta University. The first University in Assam i.e. Gauhati University was established in 1948 with 15 non-government colleges affiliated to it. During those days there were no other organizations except All Assam College Teachers' Association (ACTA) for redressal of grievances in the colleges. College librarians were also members of ACTA during that time. But ACTA did not show any interest to look after the problems of the college librarians and often neglected the college librarians as inferior to them. Because of this attitude, few enthusiastic college librarians of that time viz. Birendra Kumar Sarma of Pragjyatish College, Dilip Kumar Sarma of B.Barooah College, Prabhat Mishra of Arya Vidyapith College, Bomkim Biswas of Pandu College and Mahendra Sarma of Nalbari College had decided to form an independent association for the college librarians of Assam as Assam College Librarians' Association (ACLA) in 1973 with Prabhat Mishra and Dilip Kumar Sarma as the founder President and General Secretary of ACLA respectively. The ACLA started its journey in 1973 and Registered under the Societies Registration Act, 1860 in 1977 during the tenure of second General Secretary of ACLA Sri Birendra Kr. Sarma. The first general conference of ACLA was held under the initiative of founder General Secretary Dilip Kr. Sarma at J.B.College,

Jorhat during May 21 – 23, 1982. Prof Ajit Kumar Sarma and Sri Birendra Kumar Sarma was reselected as President and General Secretary respectively and it is to be mentioned that in that conference Dr. Narendra Lahkar, Department of Library and Information Science, Gauhati University was selected as the Assistant General Secretary of ACLA. During the tenure of Prof. Ajit Kr. Sarma and Sri Birendra Kr. Sarma, many milestones were achieved by ACLA including UGC pay scales to college librarians of Assam.

ACLA an itroduction

The Assam College Librarians' Association with its acronym ACLA was established with an aim to improve the college library services and the service condition of the working librarians. During those days generally, a person in clerical grade did the work of a librarian as part time job under the supervision of a college teacher who was in-charge of the library. However, under the personal care and guidance of a few distinguished scholar and College Principals of that time, a few number of colleges viz. Cotton College, Pragjyotish College have developed their libraries as treasures of selected books. Till 1967, there were only three colleges having professionally qualified librarians, out of 94 Govt. aided colleges in Assam. Gradually the number of qualified college librarians increased as Gauhati University introduced Library Science Course (BLibSc) in the evening shift in 1966. The course was initially started with university librarian as HoD. The Department of Library Science, GU had changed its nomenclature and is renamed as Department of Library and Information Science in 1986 and the acronym Bachelor and Master Degrees were also changed as BLISc and MLISc respectively. Moreover, in 2001, the Department has introduced two year integrated MLISc course and the process of admission criteria has also changed; instead of admitting students based only on Bachelor degree performance, the admission criteria has included Academic performance as well as performance in the Admission test. This has certainly attracted meritorious students to the department in a big way. This has a very good impact in developing professionalism in particular and the library services in general.

Aims and objectives of ACLA:

* To strive for and contribute towards the all round improvement of the college library services for the cause of education system within the state in general and collegiate education in particular;

* To safeguard the interests of the members of the Association and improve the service condition and status;

* To render necessary help to the distressed members of the Association and their families;

* To promote study and formulate principles for imparting education through the library by holding seminars, publishing bulletin and journals for the purpose; and

* To maintain and keep the Association away from political involvement.

Role of ACLA in Implementing UGC Scale of Pay to college librarian

Till 1987 the UGC pay scale was not given to the college librarians of Assam. In 1977 the ACLA has decided to launch its movement demanding for implementation of UGC pay scale to the college librarians and submitted a memorandum to the then Chief Minister of Assam Hiteswar Saikia requesting him to provide the UGC pay scale w.e.f. 01.01.1973 to the professionally qualified college librarians and urged the Govt. to stop appointment of non-qualified graduate librarians in the colleges immediately. The Association also requested the Govt. that the existing non-qualified graduate college librarians be deputed to the B.Lib.Sc course of Gauhati University for getting professional degree.

The movement of ACLA got a new direction in the year 1979 while Prof. Ajit Kumar Sarma, a MP and a multifaceted personality, took the charge of the Association as President. Under the dynamic leadership of Prof. Ajit Kumar Sarma, the ACLA got its strength and dignity. He had a pleasant personality that attracts all. His stewardess in ACLA for long 14 years as President had given the Association new directions and guidelines which benefitted the college librarians a lot and ultimately UGC pay scale was given to the college librarians in 1987 under his able leadership. The major achievements of ACLA during the tenure of Prof. Ajit Kumar Sarma are stated bellow:

* In 1980 Govt. of Assam accepted a staff norm for the college libraries of Assam and accordingly the post of library assistants and library bearers were created in 1980. A post of Assistant Librarian was sanctioned for the college libraries having minimum 30 thousand or more books in the library.

* UGC pay scale was implemented on **5th August 1987** to the college librarians of Deficit Grants-in-aid system colleges with effect from 1.1.1973 notionally and financial benefit w.e.f. 5.8.1987.

* The Govt. had allowed the college librarians who were completed 5 years of service and bellow 50 years of age to take admission into B.Lib.Sc. or M.Lib.Sc. Course in 1989 for becoming eligible in UGC scale of pay.

* Implementation of revised UGC pay scale (Rs.2200-4000) as recommended by the Govt. of India with revised norms of qualification w.e.f. 1.1.1986 with no incremental benefits to those who had joined between 1.1.1973 – 1.1.1986 without Master's degree.

Support of Department of Library Science, Gauhati University

The Department of Library & Information Science, Gauhati University had extended manifold support to the college librarians for getting their professional degree during the initial stage of UGC scale of pay extended to the college librarians of Assam. As Govt. of Assam imposed certain conditions on the qualification of the college librarians for obtaining the UGC pay scale, the DLISc, GU extended a great support to the college librarians for acquiring professional degrees. The Department was started in the evening shift at Gauhati University library in 1966 with the provision of providing B.Lib.Sc degree and later in the year 1979 Master of Library Science (M.Lib.Sc.) was introduced with university librarian Dr. Jogeswar Sarma as HoD. A full fledged independent Department of Library Science was formed in 1983 by the Gauhati University and Prof. Alaka Buragohain took over the charge as Head of the Department. The Department under the Headship of Prof.Alaka Buragohain played a very important role in obtaining the UGC scale of pay to the college librarians.

The DLISc., G.U., under the Headship of Prof Alaka Buragohain organized for the first time a UGC sponsored refresher course of 21 days duration on academic librarianship during June 6 – 26, 1986. Prof.P.N.Kaula was invited as a Resource person. Prof. P.N.Kaula while attending the refresher course as a resource person in the Department met the Commissioner and Secretary, Department of Education, Govt. of Assam and explained about the need of library-centric education rather than classroom-centric, highlighting the role of librarians in the success of the education system and impressed upon him for implementation of UGC

scale of pay to the college librarians of Assam. In active co-operation of the DLISc., GU during the time of Refresher Course, an eighteen member delegation of ACLA under the leadership of Prof. Alaka Buragogain met the Hon'ble Education Minister and submitted all necessary documents in favour of UGC pay scale to college librarians of Assam in 1986.

The ACLA under the Presidentship of Prof.Ajit Kumar Sarma unanimously decided to resort agitation in 1986 in protest against the apathetic attitude of the Govt. towards the college librarians with the co-operation of organizations like All Assam Students' Union (AASU); Assam College Teachers' Association (ACTA); Gauhati University Teachers' Association (GUTA); Assam College Principals' Council (ACPC) etc. Ultimately after a long nine years of struggles, the Govt. of Assam during the Ministry of AsomGana Parishad (AGP) declared UGC pay scale to the college librarians on 5th August, 1987. This was the turning point of college librarianship in Assam. After that the college libraries of Assam started moving towards the path of development and many young people are attracted towards the profession.

Role of ACLA in Promoting the Professional Status in College Libraries

Though UGC pay scale was extended to the college librarian, many problems of the working college librarians were to be resolved by the Association through the discussions with the Govt. of Assam which became a challenge of ACLA. The Association in its 6th general conference discussed the core problems of the members of ACLA and formed a new executive committee with Prof.Alaka Buragohain as President in 1995. The ACLA got another dynamic personality after Prof.Ajit Kumar Sarma as President and under the able leadership of Prof. Buragohain, the college library services attained a new place in higher education and gradually started moving towards the age of computerization.

During the tenure of Prof. Buragohain as President of ACLA, many academic and professional activities of the Association were carried out. She brought the proposal of formation of a **library committee** for smooth functioning of the college libraries and placed the demand before the Director of Higher Education, Govt. of Assam and urged upon him to create a **subsidiary bank account** for the college library for proper utilization of

library fund. Both the demands of ACLA were accepted by the Director of higher Education, which played a very important role for smooth management of college libraries. Other major achievements of ACLA during the tenure of Prof. Buragohain are stated bellow:

* Demand for pension under the Pension Act, 1997 for the college librarians was accepted by the Govt. of Assam

* Revised UGC pay scale to the college librarians with minimum requisite qualification at par with college teachers was approved in 1999 w.e.f. 1.1.1996. The qualification of college librarians was made Master Degree in Library & Information Science as compulsory instead of BLISc with Master degree in any other discipline. Qualifying NET was also made compulsory like the college teachers.

* Selection Grade Scale of pay was given to the college librarian in 1999 for the first time.

* Demand for withdrawal of stagnancy on annual increment in case of college librarians without Master's degree who joined before 1.1.1986 was accepted by the Govt.

* At the request of the ACLA, the DLISc., GU started a self funding special MLISc. Course in 2000 – 2001 with study leave approved by the Govt. of Assam for the under qualified college librarians for withdrawal of stagnancy in yearly increment which benefitted many under qualified college librarians of that time in getting the UGC regular pay scale after completion of the course.

* The promotion of college librarians into selection grade scale of pay was carried out for the first time by the State Selection Board constituted by the Govt. of Assam.

The status of the college librarians have been improving gradually as they become professionally qualified. The ACLA stressed upon the improvement of the college library services and many training programmes on skill development for the college librarians were organized to equip them with the professional activities.

Automation of College Libraries: role of ACLA

In 2000, the INFLIBNET Centre, Ahmedabad has released an integrated library management software SOUL (Software for University Library) for the University and College libraries. Development of SOUL

by the INFLIBNET Centre has brought revolutionary changes in the automation scenario of college libraries of Assam. The Govt. of India, Ministry of Human Resource Development had decided to distribute the SOUL package free of cost to the colleges of North East come under Section 12(B) and 2(F) of UGC Act, 1956 under the Prime Minister's special higher education scheme for the North East. The UGC through INFLIBNET Centre, Ahmedabad had started the distribution of the package along with training for handling the package at Ahmedabad in the year 2005. The entire cost of training at Ahmedabad along with software cost was borne by the Govt. of India. College librarians of Assam participated in the said training pragramme at INFLIBNET Centre, Ahmedabad batch wise. But after the completion of training by few batches of college librarians, the scheme was suddenly stopped for some unknown reasons by the Regional Office of UGC (NERO), Guwahati. The scheme was non-operational till 2007. The ACLA then came forward to revive the scheme of free distribution of SOUL package upon hearing the members complaint about the apathetic attitude of the UGC Regional Office for not forwarding the application of the colleges to the INFLIBNET Centre for receiving and participating in the training programme of SOUL free of cost under the scheme. A delegation of ACLA headed by President Prof Alaka Buragohain and General Secretary Dr Dhrubajit Das had submitted an application to Dr.Jagadish Arora, Director of INFLIBNET Centre who came to Guwahati for participating in the PLANNER 2007. The ACLA arranged a discussion between the Director, INFLIBNET Centre and Deputy Secretary, UGC-NERO in December, 2007 at Regional Office Guwahati. The discussion was fruitful and the scheme of free distribution of SOUL package revived. The delegation of ACLA also requested the Director, INFLIBNET Centre to arrange the library automation training programme for the college librarians here at Guwahati instead of at Ahmedabad and also urged to appoint a regional SOUL coordinator to look after the installation and other problems of the SOUL package. Revival of free distribution of SOUL package during the Presidentship of Prof Alaka Buragohain was one of the remarkable achievements of ACLA which promotes the automation activities of the college libraries very fast.

ACLA's Memorandum to UGC Pay Review Committee

A five member team of ACLA headed by President Prof Alaka Buragohain and General Secretary Dr Dhrubajit Das interacted with the UGC Pay Review Committee at Gauhati University on 12.08.2008 and submitted a memorandum to the Chairman, UGC Pay Review Committee for inclusion of some vital demands of the college librarians in the UGC Pay Revision Recommendation. These demands are:

* according academic status to the college librarians by the UGC in clear term
* sanctioning of duty leave, study leave etc to the librarians like teachers
* extending advance incremental benefits to the Ph.D. degree holder college librarians
* formulation of an uniform set of service code, staff formula, library rules
* allowing college librarians to undertake Major Research Project of UGC and
* introduction of Super Selection/Professor grade post for the college librarians also

It is worthwhile to mention that the UGC in its Regulation, 2010 has included some of the proposals proposed by the ACLA before the members of the Pay Review Committee in 2008. The proposals like eligibility of college librarians for undertaking Major Research Project, incremental benefits to PhD degree holder college librarians have been included in the UGC Regulation, 2010.

Moving towards Digital Environment

The automation activities of the college libraries of Assam are taking place at great pace due to the support provided by the INFLIBNET Centre. Most of the colleges in urban areas have completed the automation activities and started providing fully automated services to their clients. These libraries are gradually started providing digital library services to the users.

Prof. Narendra Lahkar**,** Professor, Department of Library and Information Science took the charge of the Association as President from Prof. AlakaBuragohain in **November 2008**. He has brought many changes in the functioning of ACLA and emphasized on using modern ICT in the college libraries so as to meet the challenge of the present digital age. The college libraries have been started enjoining the facility of accessing online e-resources from the INFLIBNET Centre, Ahmedabad under N-LIST programme from the year 2010. Online e-resources under N-LIST progragramme are providing free of cost to the college libraries of Assam come under Section 12(B) and 2(F) of UGC Act, 1956 by the INFLIBNET

Centre under the Prime Minister's Scheme. More than 148 college out of 189 provincialised colleges in Assam are receiving more than 90,000 e-books and 7, 000 e-journals online under N-LIST programme which immensely benefitted the teachers and students of the colleges.

The ACLA under the Presidentship of Prof. Narendra Lahkar has submitted many memorandums to the Govt. of Assam indicating some pertinent issues of college library development in general and status of the college librarian in particular. And ACLA ultimately succeeded in bringing out the two most important notifications from the Govt. of Assam on the Academic status and Governing Body Membership of the college librarians under the Presidentship of Prof. Lahkar in 2018.

Non-Vacational Academic Status of College Librarians

Govt. of Assam has ultimately accepted the long 25 years old demand of ACLA for according the non-vacational academic status to the college librarian. The Govt. of Assam, Education (Higher) Department vide Notification No. AHE.81212077 /29, dated 28-06-2018 has approved and mentioned in the notification that - *"1) The College Librarian is to be treated as Non-vacational Academic staff of the College. 2) The College Librarian is to be included in the Committee constituted for development/construction of college Library of concerned colleges"*. This is one of the major milestones that the Association has ever achieved and it become successful because of the constant hammering on the issue by the present General Secretary of ACLA - Dr.P.K.Deka supported by his professional colleagues.

Membership of the Governing Body of the College

Since long time, the ACLA urged upon the Govt. of Assam to include the college librarians as a member of the Governing Body (GB) of the college since the GB is the apex body responsible for the development of the college in general and college library in particular. And finally Govt of Assam had accepted the demand of ACLA and brought a Notification (No AHE/812/2017/28) dated 28-06-2018 which declared college librarians as Ex-Officio Member of the Governing Body of the College. This is another achievement of ACLA which will support the college librarians to work for the development of the college library services in Assam. Upon becoming

the member of the GB, a librarian can raise the vital points necessary for development of her/his college library.

Staff Pattern of College Library

The present staff pattern for the college libraries in Assam is almost 35 years old which need to be restructured. With the changing time and technology, it becomes very difficult for the college libraries to function with the old staff pattern. So the ACLA has proposed a staff pattern keeping in mind the present need of the college libraries and urged upon the Govt. to accept the staff pattern for better working and service environment of the college libraries.

Besides the above mentioned points, the ACLA also placed its demands for constitution of a college library committee mandatory for each and every college indication the powers and functions of the committee in precise term.

Conclusion

During last 45 years of journey of ACLA since its inception in 1973, the achievement may not be nearing cent percent, but the standard of college library service, infrastructure, status of college librarians have improved a lot, although there are much still to achieve. It is high time for the members of the Association to take the profession as a challenge in every respect so that the college library movement in Assam continues till it achieve desired goal. Two recent important notifications of the Govt. of Assam viz. according college librarians as Non-Vacational Academic staff and inclusion as Ex-Officio Member of the Governing Body of the college will definitely help the college librarians of Assam in developing the college library services and taking the college library movement a step forward.

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16

History of LIS Education: a Journey from Undivided Bengal to Bangladesh

Azizur Rahman
Sibsankar Jana

Introduction:

Library and Information Science ((LIS) has grown and developed into a full-fledged academic discipline gradually with the passage of time. Various courses are being offered by the university departments, institutions specialized institutions and library association. In the present situation LIS education is no longer concerned with the physical collection, storage and circulation of reading materials. There are several challenges in keeping the library and information science education programme relevant to the new kind of jobs in the market and new work performance requirements at works places. Relisting the significance of LIS education for creating trained professionals for the future.

LIS education in India has started about 100 years above. LIS education in India, which began with in service training program in 1901 at the then Imperial Library (now National library) Kokata and another training course already was introduced in the state of Borada in 1911 and Punjab University in 1915. Dr. S.R Ranganathan, the pioneer of library science in India should be given the main credit for the development of this field. He introduced the course during the period 1926-1931 at the Madras University Library in association with Madras Library Association later on the other university started LIS courses in the years 1935-1948 respectively. Development of LIS education system in India can be divided in three major periods- Pre-Ranganathan period (In service training), Ranganathan

period (Consisted of three level courses- Certificate, Bachelor and Masters degree), Post Ranganathan period (Two new level course have been introduced Diploma and M Phil). The structure of such education that emerged during Ranganathan period consisted of mainly three levels- Certificate, Bachelors and Masters degree which was mainly based on the need.

Bangladesh has had a slow and steady growth of library education which started before independence. The country has above sixty years of history in library education. The initial stage of the 20th century may be defined the ' dark age' for education and training for librarianship in Bangladesh. There were libraries but not the methods and techniques for librarianship for systematic services by professionally qualified manpower (Ahmad, 1987) . The concept of librarianship and the necessary of library science education were felt deeply. The awareness of urgent necessary was discernable in the learned community, but there was a lack of leadership and momentum. Bangladesh had more time to wait even after the partition of India in 1947. No major and consistent steps were taken until 1952. (Rahman, 2008)

Objective of the study

The main objective of the study are :

2.1 To know the condition of Library education in India before independency.

2.2 To know the development of LIS education in India and undivided Bengal during 1948-1971.

2.3 To know the development of LIS education in Bangladesh from after 1971 to till now.

Methodology

The study is based on historical method and personal interview with working library professional and leading library professional regarding development of LIS education in India & Bangladesh side by side.

Backdrop

Library education in India has started hundred and Bangladesh sixty years above. During this period development of library education can be categorized in to the three phases. Now we can discuss in details are given below:

1. First Phase (Then Bengal before 1947)

2. Second Phase (Un divided Bangladesh from 1947-1971)

3. Third Phase (1971 to till now Present Bangladesh)

First Phase :

The foundation of LIS education in India above 100 years back. Though LIS education in India began with in-service training programme introduced by John Macfariane, the first librarian of the Imperial Library (now National Library) in Kolkata in 1901, the first library school in the country was started in 1911 by an American librarian, W A Borden who came to Boroda to manage the public library system of that princely state. Four years later in 1915, another American librarian Asa Don Dickenson initiated a systematic training programme at Punjab university. This was the first university course in India. The Andhra Desa Library Association (Founded in 1914) started training classes for the library workers in the state in 1920 at Vijayawada. At the initiative of the then Dewan of Mysore, M Visweswarayya, a course for the training of librarians was conducted at Bangalore under the programme of library development in 1920. A regular certificate course was started by Madras Library Association (MALA) in 1929 which was later taken up by university of Madras in 1931 and continued on regular basis. A short-lived certificate course was started by Andhra University in 1935. The Imperial library, Calcutta started a regular full time diploma course in librarianship in 1935. It continued till 1946. The Bengal Library Association arranged a ''Library Training camp ''at Banasberia in 1935. At the initiative of S. R. Ranganathan, University of Madras started a one year post Graduate Diploma course in librarianship in 1937. It replaced the certificate course started earlier. The Banaras Hindu University and University of Bombay started similar post-graduate diploma course in 1942 and 1943 respectively (Joshi, 1999)

Second Phase

The University of Delhi started post-graduate diploma in library science in 1947 and next year initiated the first post graduate diploma course. In 1951, the Diploma was hanged to master in library science (M.Lib.Sc.). latere, between 1956 to 1959, six new LIS departments were established

at Aligar Muslim University, M.S. University of Baroda, Nagpur university, Osmania University, Pune University and Vikram University. Since 1960s, the number of LIS department established has continued to increase. During this period, several institute played important role for the development of LIS education. University of Madras started her Post Graduate Diploma in Library Science. University of Delhi contributed many first such as the starting of Master in library science in 1951 which in 1972 on account of a major course revision was renamed Master in Library and Information Science (MLIS). The department name was also changed to Department of Library and Information Science. The course on' Computer Application in Libraries' was introduced for the first time in MLIS Programme in 1972. The M.Phill programme started in 1978. The first Ph.D was awarded to D.B Krishna Rao in 1957 under the supervision of Dr. S.R. Ranganathan. There are many development in India more than 181 universities and institutions are presently imparting LIS education. Among them 131university/ institution are conducting Bachelor Degree course. 136 universities are conducting masters degree, 39 universities are conducting integrated masters degree, 21 universities are conducting M Phil degree, 93 universities are conducting Ph.D degree, 37 universities are conducting distance mode courses. Besides 3 university are conducting five year master's degree course. (Chatterjee, 2016)

The first breakthrough came in 1952 when the three month training course for library staff was introduced at Dhaka university library by its London-trained Librarian, Mr.Fazal Elahi. The course was discontinued after only one session. Between 1955 and 1959 the four three month training courses were conducted with the help of Fulbright scholars under the supervision of M.S khan, Librarian, Dhaka University Library. The Courses drew the attention of a good number of library staff and persons interested in librarianship. There was no training facility apart from this course available in Bangladesh until October 1958, when the newly formed East Pakistan Library Association (EPLA-1956). Now the library Association of Bangladesh instituted a regular 6 month library education at undergraduate level in Bangladesh. This was the first regular educational course in this profession. This course was very important for creating sub professional in library management of this country. (Munshi, 2007)

University of Dhaka (DU): University of Dhaka is the oldest university in Bangladesh. It was established on July 21, 1921 under the

Government of India Act of 1920 . It is the largest public university in Bangladesh. In order to create qualified professional in Library Science a department name ‘‘Department of Library Science ‘‘ was created in 1959 and in the session 1959-60 a one year Post Graduate Diploma (PGD) course in Library science was started in accordance with the course curriculum of London University. Mr M.S Khan then the president of Library Association and Librarian of the Dhaka University was appointed as the head of this new Department. In the session 1962-63 a one year MA Course was started for the Diploma holder thus a full flagged department was started under the name ‘ Library Science’’ in Dhaka University. This department was first Library Science department in University of Dhaka in Bangladesh.

Third Phase University of Dhaka (DU): In the session 1975-76 MA courses of two years duration was started . One year PGD course in LIS also ran side by side. In the session 1976-77 M. Phil course of two years duration was started in the year of 1978-79 , Ph.D course of three to five years duration started. In this way due to initiative of Library Association educational qualification in this field became progress was fulfilled. In the year 1987-88 the name of the Department of Library Science was changed to Department of Library and Information Science and three years honors course was started. In the year 1997-98 the duration for three years honors course changed to four years and in the year 2001-02 the name of the Department of Library and Information was changed to Information Science and Library Management. The Post Graduate Diploma courses was discontinue in Dhaka University with starting of Honors course. The Masters (MA evening) in Library and Information Science is continuing in Dhaka University from the year of 2005-06. (Rahman M. A., 2016)

University of Rajshahi (RU) : University of Rajshahi second largest public university in Bangladesh and it was established in 1953 . An one-year PGD course in Library Science had been initiated to start in 1991-92. The department of Information Science & Library management, previously known as library & Information Science started its journey in 1992-1993 academic session under the faculty of Social Science by Successfully launching a three-year honor’s degree (Bachelor of Social Science, BSS in Short). In 1995-96 academic session the department

introduced a one year master program (Master of Social Science, MSS in Short) for its graduates only. In 1997-98 the three year honor's degree was converted into four year integrated honor's program to carry out demand of the age. The department also offers M.Phil and Ph.D program from the year of 2006-2007. Since 2014 two years evening master course (EMSS) on this subject has been launching successfully. Due to tremendous pressure in providing well-trained manpower in library sector, especially for government decision in recruiting library professional in high school and college library ,the department has been restarted one year Post Graduate Diploma Course (DISLM) since 2014. (Rahman M. A., 2017)

National University (NU):

National university of Bangladesh was established in 1992 .From the year 1999 to till now as per approval of National University 32 Institutes are (Institute of Library & Information Management, Dhaka 1997),(Institute of Library ,Arts Commerce and Science, Khulna 1999), (Institute of Library & Information Science, Dhaka ,1999) ,(Institute of Education, Library & Management College, Khulna 2000), (Institute of Library & Information Science, Mymensingh, 2001), (Library & Information Science Institute, Barishal, 2002), (Bangladesh South West Model Institute, Jessore 2004) (Pabna Al- Amana Ideal Library & Information Science College,2004), (Zia Education Development Institute, Noakhali, 2005),(Patuakhali Library & Information Science College, 2014), (Hajee gonj Ideal College of Education, Chadpur 2014), (Sundorbone College of Technology, Satkhira 2014), (Dr. M, Mizanur Rahman Professional College, Dhaka, 2014), (Gazipur Library Science & Professional Institute, 2015), (Jus Institute, Shylet, 2015), (Library & Information Science Institute , Motheripur,2015), (Uppoma Institute of Science and Technology, Rangpur, 2015), (Professional College, Bogra, 2015) (Shamoly Ideal library& Science Institute, Dhaka, 2015), (Modern Polytechniqu & Diploma in Library Science Institute, Joypurhut, 2015), (National university on Campus, Gazipur 2016), (British Bangla institute of management and technology, Mymensingh ,2017),(New model degree college, Dhaka, 2017), (Habibullah Bahar college, Dhaka, 2017), (Metropolitan College, Gazipur, 2017), (Siddhessory girls college, Dhaka, 2017, (Dhaka Profession college, Dhaka, 2017) rendering to PGD course in Library and Information Science in different areas of Bangladesh.

A course name Library and Information science is included as a separated subject in degree and it is being taught 15 colleges of Bangladesh(Shatkhira Day Night College, Assasuni College, Mahtabuddin Government Degree College, Birshrestha Shahid Hamidur Rahman College, Korimunnesa Mohila College, Atrai Agrani Degree College, Joldhaka College, Barharta Degree College, Barharta Degree College , Fulbaria Degree College, Kalihati College, Basail Emdad Hamida College, Barmi Degree College, Sufia Mohila Degree College, Joypara Degree College, Lalmatia Mohila College)

In Dhaka Lalmatia Mohilla colleges BA(Hons) and MA course are three colleges as per approval of the National university (Lalmatia Mohila College, Dhaka), Institute of Education Library Management(IELAM), (Habibullah Bahar college, Dhaka) . At present from the year of 2015 Masters of Advance Studies (Equivalent M.Phil) and Ph.D Course in Library and Information Science started under National University. (University, 2016)

Noakhali Science and Technology University (NSTU):

Noakhali Science and Technology University was established in 2004 .The Institute of Information Sciences (IIS) has been established under Noakhali Science and Technology University Act 2001, Section 41 as a constituent Institute with a separate Board of Governors. The Institute has provided Post Graduate Diploma (PGD), Bachelor of Honors degrees in the area of Library and Information from the year of 2017 and respectively 2018.

Library education in Bangladesh is offered at several levels, including certificate, BA/BSS (Honors), Master's, and doctorate. There are at least three (MA, MSS, M.Sc) types of master's degree programs. Duration of courses ranges from six months to four years. The same certificate, diploma, or degree course name, and name of awarding certificate or degree can vary among universities and institutions. Numbers of credits can also vary. Among public universities, the University of Dhaka offers a four-year BA (honors) course, one-year MA, two-year MA (evening), two-year M.Phil, and three to five year Ph.D program. The current scenario LIS education in Bangladesh may be categorized as follows:

Table-1: Level of LIS Education in the Public (Government) University and LA

Education Level	Course Name	Duration of Course	Offered by	Intake Capacity
Certificate	Certificate in Library and Information Science (CLIS)	6 months	LAB	50
Post Graduate Diploma	Post-Graduate Diploma in Library and Information Science(PGDLIS)	1 year	RU	200
			NU	120
			NSTU	120
Bachelor	Bachelor of Information Science and Library Management(BA/BSS(HonS)	4 years	DU	60
			RU	66
			NU	50
			NSTU	50
Bachelor	Bachelor of Arts (Pass) (Optional subject) BA(Pass)	3 years	NU	Approval of seat
Master	Master of Information Science and Library Management MA/MSS	1 year	DU	60
			RU	66
			NU	50
Master (Evening)	Master of Information Science and Library Management (MA (Evening)	2 years	DU	200
			RU	200
Research	Master of Philosophy (M.Phil /MAS)	2 years	DU	For vacancy
			RU	For vacancy
			NU	For vacancy
Doctorate	Doctor of Philosophy (Ph.D)	3-5 years	DU	For vacancy
			RU	For vacancy
			NU	For vacancy

LIS Education in Private University of Bangladesh:

There are also some private Universities offering LIS education in this field side by side. Among private universities of International Islamic University of Chittagong (IIUC) offers a one-year PGD course, Isakha International University of Bangladesh, Kishorgonj started one year (Three semester) postgraduate Diploma course in LIS from 2013. Khwaja Yunus Ali University, Sirajgonj has started the PGD course in LIS. Sheikh Fazilatunnesa Mujib university Jamalpur, started one year Postgraduate Diploma in LIS from 2015. Recently Daffodil International university of Bangladesh started one year Postgraduate Diploma In LIS from 2016. On the other hand Royal University of Bangladesh is also introduced MA course in LIS and Asian University of Bangladesh two-year (4 semesters) MA Course in LIS and East west University, Dhaka and Khwaja Yunus Ali University, Sirajgonj has started the Honors course in the year of 2014-15. The present scenario of LIS Education under private university in Bangladesh as follows :

Table2. LIS Education Under Private University

Education Level	Name of the University	Year of Est.	Course structure	Duration	Semester	Intake capacity
PGD	Sheikh FazilatunnessaMujib University	2014	2016	1 year	02	60
	Coxs Bazer University	2013	2014	1 Year	02	50
	Daffodil International University	2002	2015	1 year	03	50
	Feni University	2012	2015	1 Year	02	50
	Ishakha International University	2012	2013	1 Year	03	50
	International Islamic University	1995	2009	1 Year	02	200
	Khwaja Yunus Ali University	2010	2016	1 Year	02	50
B.S.S (Hons)	East West University	1996	2016	4 Years	08	40
	Khwaja Yunus Ali University	2010	2013	4 Years	08	30
Master	Asian University of Bangladesh	1996	2010	2 Years	04	200
	Royal University of Bangladesh	2003	2005	20 month	05	170

Conclusion:

Finally it can be expressed that library education and need for qualified manpower for different types of libraries are important issue for any country. All these developments have a great impact on LIS schools having the responsibility to produce competent professionals to man and manage libraries of today and tomorrow. LIS education must be well planned and should be developed with a more realistic manner. LIS education should not only meet the urgent needs but the future needs. The scope and opportunity of LIS education should be extended with national and global standard.

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17

Public Libraries in Assam How far Public? A study of two District Libraries

Latifur Alom Ahmed
Rajani Kanta Barman
Kukila Goswami

Introduction

Public libraries play a great role in all round development in the society for which it is commonly known as people's university. UNESCO in 1942 in their public library manifesto declares it as a democratic institution and a must for every nation. India, a member of UNESCO soon after its independence in 1947 took a bold step to develop public library network in India in its first five year plan. As a result of which a lot of programmes were undertaken to develop the public library services in India. The impact of this was also felt in Assam. The following paragraphs are a humble attempt to through light on the performance scenario of public library services in Assam particularly in the two districts.

Public Libraries in Assam

Assam one of the statein North East India comprised of the following sister states namely Manipur, Mizoram, Nagaland, Meghalaya, Arunachal, Tripura and Sikkim. Assam at present consisting of 33 districts and 78 subdivisions. The first initiative of public library dates back to 1904 when the BritishAdministrators setup a public library at Shillong the then capital of Assam. The library catered to the needs of British high ranking officers and intellectuals. There was no public libraries in real sense of terms till

1924 when British Government formally declared the Shillong library open for the public in general.

Following independence in 1947 there was common awareness for library services and government of India under the able leadership of Pandit Jawaharlal Nehru(first Prime Minister in India) and MaulanaAbulKalam Azad the then Education Minister of India took a bold step to develop public library network for Indian people under the scheme "Development of Public Libraries in 1952". Following the above central government scheme under the able leadership of Bishnu Ram Medhi the then Chief Minister of Assam.Government established seven district libraries in Assam. These were Dibrugarh, Tezpur, Dhubri, Jorhat, Silchar, Nagaon and Guwahati. For last 67 years the libraries have been serving to the people of Assam by offering different types of modern library services. However with the change of time the boundary of two districts has been changed following creation of new districts curving out the then existing Goalpara and Lakhimpur districts. The following table shows the present position of the earth while two district libraries.

Objectives of the study

The study is an attempt to observe the services offered by the district libraries of Dibrugarh and Dhubri. It also aims to study services offered to the common people and the extend of reaching out of the two libraries also to find the impact of modernization of library services in these remote districts of Assam.

Methodology

Comparative method has been adopted to study the growth and development of two district libraries. Personal visit to the places were made to collect the primary data also discussion has been made with the

concerned library staff to understand the different issues connected with library services. As already mentioned this study confines to two present district libraries that is Dibrugarh district library and Dhubri district library. The first one is located in the upper Assam bordering China and the other is in the lower Assam bordering Bangladesh.

District Library, Dibrugarh

Dibrugarh has been the oldest district headquarter of erstwhile Lakhimpur district surrounded by tea gardens and oil reserves. The district is very rich in its natural resources. At present Dibrugarh itself is a full-fledged district. It has one university, one medical college, twenty sevencolleges and with a population of 1326335(As per 2011 Census). The total membership in the district library is only 12374. So 0.93% of the total population of the district have been covered by the library services. Again the number of total literate people in the district is 884531 i.e. 76% of the total population. Out of this literates people the library has been able to offer its services to 12374 users that is 1.40% which is very poor.

So far document is concerned the library has total collection of 156270 documents including 17832 from RRLF. It subscribes eight news papers (Enlish-3, Assamese-8). It is to be noticed that there has not been any Hindi and Bengali newspaper subscribed by the library, though a good number of Bengali and Hindi speaking people live in the area covered by district library, Dibrugarh. Besides literature for different tribal communities such as Deuri, Chutia, Motok and Moran are not available.

District Library, Dhubri

The origin of district library, Dhubri may be traced to the Cotton Library established by Asom Sangha Hall which was managed by a local board and in 1956 it was taken over by government of Assam following the central government scheme of 1955 mentioned above.

Dhubri was the district headquarter erstwhile Goalpara district lying in lower Assam bordering Bangladesh. The population of the district is 1949258(As per census 2011). The total literate people of Dhubri district is 922341 i.e. 58.34%. The registered number of users in this district is only 7619 that is 0.39% of total population is covered by the library. Again the district has literate people of the district is 922341 out of which only 7619 is

the registered users showing 0.82% of literate people has been covered by the district library. This gloomy picture reflects the sad story of library services in this district. It may be mentioned that though the district has important towns namely Golakganj, Gouripur, Bilasipara, Sapatgram, Chapar unfortunately there is no government sponsored public library.

The present library building was constructed in the year 1985.The library subscribes eight newspapers of which English-3, Assamese-4 and Bengali-1. The total collection of the library is 84111 including a collection of 21591 from RRLF. Unfortunately the library has only 7619 as registered members. This shows that only 0.82% of total literate people of Dhubri district is member of the district library, In other words we may say the district library Dhubri has been able to attract only an insignificant portion of literate people of the district.

Modernization of Dibrugarh District Library

Traditional services are being offered by this district library. In the name of modernization, there has been only one contractual staff for looking afterlibrary automation who is making dataentry operation using Koha software. The progress of the work is not satisfactory. OPAC which a common feature in mordern librarianship is yet to be offered by the library.

At present the library has five computers, one Xerox, and one scanner. The library regularly gets donation from RRLF through Directorate of Public Library Services, Assam.The reading room facility, sitting accommodation andstacks all are out dated which never attract the users. Besides the lighting facilities are also not sufficient in the reading room and stack area.

Modernization of Dhubri District Library

The modernization of library has been initiated with seven computers, one printer, one scanner and one Xerox machine. However OPAC service is yet to be introduced. Data entry operation is going on by the permanent staff of the library. The usual reading room facilities for common user are not satisfactory through a lot of improvement are planned to be made to attract the users.

Analysis

Both the libraries are located in Dibrugarh and Dhubri main town and comfortably located in the prominent place having their own building and easy access to common people. Besides both the libraries have special

provision for physically challenged people. Both the libraries have sufficient number of manpower, and suitable accommodation for children corner. However both the libraries still suffer from reaching out the common people defeating the main objectives of the public library manifesto of UNESCO.

In case of district library, Dibrugarh, it is found that only 1.40% of the entire literate population has been covered by the public library services. In case of district library, Dhubri, only 0.82% of the entire literate population has been covered by the district library of Dhubri. Thus it is revealed that Dibrugarh district library has been able to cover 1.40% of entire literate population while Dhubri district library has been able to cover only 0.82% of entire literate people. Out of total population in Dibrugarh district, the district library covers only0.93% of total population while in Dhubri district library users percentage is 0.39 of the total population.

The above situation clearly shows none of the two district libraries has been able to reach 1% of its total population under its services. Thus the question arises in minds of the investigator how far our public library services has been public. This pathetic scenario needs urgent attention of the government and social thinkers to bring a change in the administration of public libraries so as to encourage the younger generation to utilise the library services offered by the district libraries. The literate people of two districts should make sincere attempts to enrolthemselves as registered members of the library. Above all the library professionals of this two districts should try for special campaigning for enrolling new members. Besides extension services may be offered by providing mobile library services. Physical facilities in both the library should be improved so as to attract more and more library users. Besides, the library staff should undertake special publicity drives for awareness of the common people about public library services and its usefulness.

Conclusion

The study of two district libraries of Assam gives a grim picture of public library services in Assam. The scenario of other places is more or less similar. Though India own independences in 1947 it is still lying backward so far public library services are concerned. Only 1.40% in Dibrugarh and 0.83% of Dhubri district of literate population being member of public

libraries is a shameful facts showing reaching out of the public libraries is very very poor. Government, library professionals and local people especially in educated ones should come forward to develop their libraries for the welfare of common people and future generation.

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Role of the libraries in harnessing Information literary and rural development: a conceptual proposal

Tilak Hazarika

Introduction

Convergence of technologies has contributing tremendously to the explosion of information, which is contributing to the acceleration of the socio-economic growth, and ultimately adding impetus to the refinement of the quality of life of men. However, the bitter truth is that the boon of this information revolution is yet to touch each and every citizen of the countries, even in the most advanced ones. This imbalance in the availability and accessibility to information in right perspectives has given rise to divide the whole world into two conceptual categories viz. the "Information haves" and "Information have nots", or Information rich and Information poors. Those in the first categories are the privileged ones to use the resources and there by the fast riders in the ladder of happiness in terms of wealth and prosperity while those in the second are still languishing in poverty and waiting for the mercy of the Almighty for their betterment in the quality of life. This situation is prevalent in every country irrespective of economic status. Countries like USA has also recognized that information revolution yet to gear up in true sense in their country as there are significant differences in the level of accessibility and consumption of information by their citizen which prompted the US president Borack Obama to declare the October, 2009 as the national information literacy awareness month. Availability of vast amount of information which is contributed by the recent advancements

of computer and telecommunication technologies is only one part of the information revolution. The development of skill in every individual to locate, access, interpret and use information effectively and efficiently to mobilize the resources of any kind within his/her reach form the other most significant part in the worldwide endeavours to a knowledge society. As such, there is an urgent need for promoting information literacy in the society by identifying, nourishing and revamping the existing systems and channels practicized traditionally; followed by exploring newer possibilities in the lap of modern information environment towards cultivating the same. Scope of the public library system towards playing a role in harnessing information literacy in the state of Assam, more particularly, focusing on the marginalized class is discussed in this paper followed by a sketch of a model focusing on a particular vocation considered one of the most potentials to invigorate.

Objectives

Apropos to the realm of this paper, the following objectives have been lined up:

1. To imbibe scope and dimension of the term "Information Literacy" scanning different definitions available through literature search;
2. To examine few areas suffering worst due to lack of information literacy particularly in rural Assam; and
3. To draw a roadmap for inculcating information literacy enlisting public library system as a player.

Information Literacy: scope and emphasis

Accessibility to right information at the right time to the right person in the best convenient format and language has always been advocated as the basic requirement for ensuring use of information in right earnest. With the grace of various modern information channels, information is being generated by different agencies, communicated through a variety of mediums, almost in insurmountable quantities. It has become a daunting task even for the voracious, conscious person to access and use the right information to meet his/her need optimally. Unless people become trained with the necessary skill to identify the right information precisely, there are every chances of turning up to mark the huge flow of information reached to him nothing other than as unnecessary garbage which is more commonly referred to as information overload. Information literacy espouse specifically

to develop the necessary skill one need to access, analyze, interpret and use information to add momentum to the task at hand to accomplice in a most successful and productive manner. Paul and Elder (2000) have rightly established the analogy of information literacy to critical thinking skill of an individual which entail the ability "to gather and assess relevant information" as well as "problem solving abilities".

There are different views proposed by different scholars regarding the scope and emphasis on information literacy. Paul Zurkowski was the first to use the term "information literacy" in 1974 in a submission to the US National Commission on Libraries and Information Science to identify people trained in the application of information resources to their work (Aharony, 2010; Singh, 2008; Ganaie, 2013).

UNESCO in the Alexandria Proclamation of 2005 describes information literacy and lifelong learning as the "beacons of the Information Society, illuminating the courses to development, prosperity and freedom. Information literacy empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion in all nations."

Shapiro and Hughes (1996) is of the opinion to place information literacy at the top of all other kinds of literacy (viz. technical literacy, computer literacy, internet literacy, research literacy, and many other kind of illiteracies used in different context) because it is the information literacy where all other kinds of literacy culminates through the critical interpretation of by person concern in the real perspective to apply the skill in his/her need. Information literacy, as such, harbours the potentiality for human emancipation from all other information overload.

Weber and Johnson (2000) have hold the definition of CILIP (Chartered Institute of Library and Information Professionals) on information literacy which read as "Information literacy knows when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner." They have also proposed more in depth guidance for development of skills required to be information literate.

American Library Association (1989) has defined an "information literate" person is as "a person able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information" (American Library Association, 1989, para. 3).

The concept "information gatekeeper" is very often discussed in the school of mass communication which advocates certain kind of interpretation on the flow of information received at the media houses emanating from different sources in different forms before passing out to its users. This is required to check information contents which might otherwise be counterfeited, ill motived, detrimental to social harmony, or sensitive to religious believes, or any kinds of threats no matter how appealing it might be. Sometimes filtering, translation, refinement of the original item might also be necessary considering a number of factors. As such, media houses/ agencies act as information gatekeeper between the information itself and the recipient of the information. Undoubtedly, the media ethics plays as the guiding force in this regard. Persons other than the media literates; say a neo-literate or with limited exposure, might easily be misguided by information which is counterfeit, ill-motived or propagated.

Information literacy is skill based literacy of an individual for selecting effectively and efficiently the right information relevant to his business out of a wide array of information pouring into him. To this end, good number of parameters encounters regarding the authenticity of the source, understanding the relevancy of any given piece of information to accomplice a specific task at hand, expected outcome on consumption of the information, including social and legal issues. An information-literate person is able to determine the extent of his information need, access and evaluate information critically, incorporate it into his or her knowledge base, and use information effectively to accomplish a specific purpose.

In this juncture, there a dire need for information intermediaries between the information itself and those who are devoid of the necessary skill to access, interpret and use information for better productivity.

Information Literacy for Marginalized Class in Rural Assam

As per Tendulkar Committee Report, over 37 per cent of the population in India comes under Below the Poverty Line (BPL). One out of every four Indians earns less than US$0.40 per day and 75% of the poor are in rural areas. As per Census 2011, population of Assam is 3.12 crores. Of the total population, around 86 percent live in the villages of where agriculture is the major occupation. Dozens of welfare schemes are in operation in the state scattering under different departments under Union as well as state govt. and crores of rupees are pumping in to upgrade the

standard of living of those in BPL but the success story of rural development is very short. Out of an array of retarding factors, the lack of awareness of the target beneficiaries of the developmental schemes may be attributed as the major one in this regard.

The rural economy in Assam which is basically an agriculture based one is suffering a lot due to a number of factors. Insufficient irrigation facilities (only 7% land having irrigation facility), paucity of generating required investments, non-availability of market chain system are some of the major impediments facing by this sector. Incidents of protest by the farmers for minimum support price of their products and subsequent action by the authorities resulted death of a number of farmers in recent years in the state. Apart from agriculture; there are certain other occupations contribute livelihood to a sizable number of population. However, these occupations are clustered in specific locations specifically where those are being practicized over generations. A brief sketch of the distribution of these occupations in the state is given in the table 1:

Though significant efforts are being made from the part of the Union as well as state government to support the people engaged in different occupations, the result is not at all satisfactory. Out of a dozens of reasons behind these, be it the faulty implementation policies, failure to the read the root causes of the problems, unscrupulous and fraudulent corrupt practice, too much of bureaucratization, the most significant one is attributed to the lack of proper awareness from the part of the target population. An immediate impact of the failure of the developmental schemes is witnessed in migration of the populace to other options of livelihood. In search of alternate livelihood there is a huge rush of workforce to the nearest urban areas, which ultimately contributes to fueling another chain of problems. Exploitation in the form of cheap labours, destruction of forest areas when converted to residential, illegal occupation of government lands, etc. (and… the list is long enough!). The city of Guwahati is an obvious example crippled with so many problems due to disproportional migration of people from the rural areas due to devastation of the rural economy in the state. Had there been existed a synergy for inculcating 'Information literacy' among the rural areas in a most systematic and pragmatic way; it may be envisaged that the developmental programs initiated by the government(s) involving crores of rupees could yield expected fruits to support and uplift

rural economic framework in the state. In this juncture, it is tried to draw a roadmap for revitalizing the information literacy in the rural Assam tracing its roots followed by adopting tools prevalent in this information age today.

Traditional Information literacy programs in Assam

Namghar system

There is a social institution in Assam known as *Namghar*, where the people of the village gather at evening after summing up their day long activities irrespective of the occupational background. Apart from reciting holy books of the religious belief of their choice, people discuss any social issue prevalent in their locality followed by issues of regional and others; may be economic, socio-political, etc. Since the academic and professional background of the participants are varies, there had been a very fruitful discussion and all the participants including those illiterates and mostly confined within their house hold chores within the village could be highly benefitted from the meet in the *Namghar*. This may be cited as one of the best practices in inculcating information literacy among the rural folks. However, over the passes of years, due to a number of factors, the gathering in the *Namghar* went on decreasing except in the events organized commemorating/ synchronizing certain *divas/ tithi* /festivals, etc.

Moina Parijat

The *Moina Parijat* is an institution for the overall development of the children below the age of fifteen years existed almost in every nook and corners of the state flourished particularly during 1980s and 90s. School children of the locality were assembled in the afternoon in a weekday to perform a number of extracurricular activities including dance, drama, poetry recitation, debate, drawing, and many more. Buildings of local clubs, *Namghars* or any such social institutions were used as the centre of the *Moina Pariat.* Most significantly, there was a library almost in all *Moina Parijats* where story books, poems, travelogues, life sketches of great personalities were the major areas of subjects in the collection. Local newspapers and magazines were also available in the libraries. Fund for the libraries were generated mostly from the local philanthropies either in cash or in the form of book donation. Book Clubs were a regular event in the assemblies where the books read by the participant in the last week (that was borrowed from the library) were to be narrated. After that the elderly ones present there used to narrate the philosophy behind the story

of the book. Being fortunate one to participate in a *Moina Parijat* in the childhood days, this author feels that the institution was highly influential towards sowing the seed of social values, moral values, and love to nature, a dream for a better tomorrow right in the tender minds.

Way out to cultivate information literacy

Access, evaluate, interpret and use of right information at real time need is advocated in the definition and scope of information literacy. It is assumed that information literacy program may be carried out easily in an organized community in comparison to that of an unorganized one. Those who are really in thirsty, every single drop of water will be taken to the full extent. Success story of information support in an organized community may be cited from the Khera Communication and Development Project (KDP) of Rajasthan. An organized effort may be made to revamp and rejuvenate the handicraft industry, weaving industry, bell metal industry, or targeting to address the problems of the milk producers in the state. Information support to the farmers in the agriculture sector in various parameters of their need is another sector promising high return.

Taking cognizance of the KCDP, we may target any of the organized sectors to initiate information literacy program in Assam. The *Pat-Muga* weaving industry in the Sualkuchi area in the district of Kamrup rural in Assam had recently came into news for duping by some garment manufacturers scattering in different parts of the country by producing inferior quality adulterated products and selling those in the market at much cheaper price in the brand name of Sualkuchi products. Consequently, this fraudulent practice incurred huge market loss to the industry. A series of pretest were carried out by the community in the industry pressuring all stakeholders for the situation. The information need of the weaving community to rejuvenate is multifold. It ranges from awareness of the fundamental rights bestowed to citizens by the constitution, Intellectual Property Right to logistics support need. A Community Information System (CIS) for the weaving community may be an immediate attempt to reinvigorate this industry inviting input from all relevant areas and involving and integrating all channels of information pertaining to the industry. The CIS is advocated because CIS framework of information system by-passes most of the barriers of information communication particularly to the marginalized classes of the society. KCDP, Gujarat, Fishermen Information

System of Hyderabad are few obvious examples of the success of CIS. As such a skeleton of the project is drafted identifying the major components of the system as presented in the figure 1.

Community Library has been put as the hub of the Information Literacy program because the library personnel is well trained in the whole ranges of activities pertaining to collecting, recording, processing, analyzing and disseminating data and information in a most professional way. However, establishment of the liaison with other agencies pertaining to the community concern have to be established for carrying out the information management in an efficient and timely manner. A detail project assessment need to be drafted based on the requirement analysis at the target area inviting expertise from other field like IT sector, government agencies concern. In a proposal for developing community learning system, UNESCO (2009) has emphasized on the following issues to be address:

a) Legal frameworks
b) Manpower resources
c) Financial resources
d) Infrastructure and material resources
e) Information resources

One of the major areas of emphasis of the model is to develop necessary skill among the different stakeholders to access, interpret and use information gathered from various sources. To accomplice this, information would be made available in the form and language best suited to the users. Even, standard Assamese language may pause as barrier to the community. Community Radio and Community Television being vital components in this program would further entail access to information for a wide population in the most convenient time in the most convenient local language. It is however, needless to emphasize that delivering information in the local language is one of the basic objectives of CIS.

There are good numbers of schemes to extend support to the villagers like Kishan Credit Card, Fertilizer subsidy schemes to ensure better productivity in the agricultural sector, and more envisaged one the MGNREGA in order to provide employment opportunity to the marginalized

class. Apart from these, there are various ICT based policies for the eradication of poverty with public private partnership. Some important policies are: Akshaya, Anand, Bhoomi, E-chaupal, E-Seva, Gramdoot, India Agriland, Janmitra, and so forth (Jain and Saraf, 2013). There are several state governments run welfare schemes being operational in the state targeting specialized class and communities. But those in real need are not aware of these schemes, and there are regular items available in the newspapers reporting siphoning of huge chunk of the funds either by the corrupt bureaucrats or otherwise. Majority of the target beneficiaries not even heard about the names of the schemes. Unless a comprehensive information literacy program is launched in a most sustenance manner, there is very bleak scope for success of any program to empower the poor villagers. In the contemporary digital information world, information literacy requires users to have the skills to use information and communication technologies to access information for better productivity. To this end, the government of India it its draft national IT policy has rightly envisaged to make e-literate at least one person from every household in the country. To implement this much ambitious program the library system may be instrumental, if revamped in right perspective.

Conclusion

Accessibility to right information at the right time in the best personal way is regarded as the vital input for any developmental programs. Countries like India in general and Assam in particular where majority of the people are still deprived of access to his/her information to enable them to assimilate in the march to development. Cultivation of proper democracy also demands for information literacy of its citizen. It is not because of illiteracy that the pace of development in this region is retarding, but it is poor information literacy even among the literate classes. It is a dire need to come forward all stakeholders towards to support the marginalized classes particularly to make them interpret their surroundings imbibing the much needed information literacy skill towards betterment of the quality of life. In addition to this, value based teaching learning activities is much needed to cultivate the social ethics and building moral foundation among the citizen to fight against social evils like corruption in the society. In this juncture, institutions like *Moina Parijat* may be instrumental to build a strong foundation of social

responsiveness early in the childhood. Likewise, institutions like *Namghar* may be very instrumental and promising one towards moral and spiritual enrichment. *Assam Satra Mohasobha*, the premier umbrella organization in the state of Assam spearheading activities to promote the Neo-Vaishnavite ideologies may play a very significant role in promoting information literacy in the state of Assam as well.

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Table 1: Some of the Occupations in Rural Assam along with the Locality of prominence

Occupation (industry)	Location (district)
Bamboo handicraft	All over the state
Bell metal industry	Barpeta
Dry fish	Nagaon
Earthen lamp and utensil	All over the state
Jute	Kharupetia (Darrang)
Milk	Rani, Jorabat, Na mile area (Kamrup metro)
Pat-muga (garment industry)	Sualkuchi (Kamrup rural)
Pisciculture	All over the state
Sericulture	All over the state but concentrating in the Upper Assam districts
Weaving	All over the state
Zapi (bamboo hat)	Nalbari

*List inconclusive

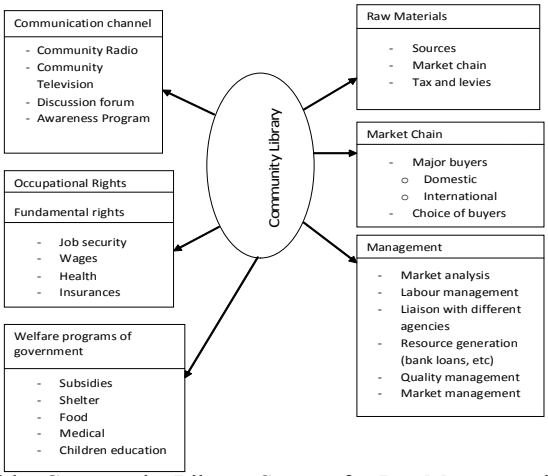

Fig 1. Sketch of the Community Library System for *Pat-Muga* weaving industry in Sualkuchi (Kamrup metro)

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Courses on Preservation in Library and Information Science curricula of the universities in North East India

Dipen Deka

Introduction:

Libraries and the archives were set up to preserve the knowledge of our forefathers which are assumed to be the heritage of the society. Storage and preservation of the different types of documents and the materials was the first priority of those centres. The reason of this choice may probably be the less production and availability of the documents because of poor technology of printing and availability of the documents in handwritten form. The preservation of these hand written documents and other handmade objects is very important for our future generation.

But after the large scale production of printed documents, the use of the documents increased and this process added a new dimension of preservation and after the development of e-resources/digital resources another new facet of preservation of documents emerged and it becomes significant for the libraries and the information centres.

The preservation and conservation of our cultural heritage is an important issue which cannot be covered completely in LIS education of the traditional LIS schools. It is a vast area as list the objects which we can include in cultural heritage category is very long. It will start from the monuments, heritage buildings, paintings, manuscripts, photographs and many others. Here, an attempt is made to focus to which extent the issues related to preservation of the documents which are available in handwritten or

printed form are given due attention in the LIS curriculum in the universities of North East India and the various training programme on preservation offered by various national level organizations.

Issues in preservation:

There are lots of issues to be incorporated related to preservation. Let us start with the concept of preservation. We use the terms preservation and conservation as identical. To keep an object safe from harm or loss, damage, decay and maintaining it in a good condition for future use we use the term preservation or conservation. Another issue is "preservation includes not only physical materials but also information" which is always neglected when we talk or think about preservation. (Balloffet & Hille, 2009, xvii)

But the truth is that preservation is one aspect of the term conservation. Basically conservation has three aspects examination, preservation and restoration. Hence preservation deals with the maintenance aspect and conservation deals with remedial treatment of the objects.

Preservation and conservation is a complicated job which is not possible by the LIS professional alone. Another two types of professional deal with archives and museums can share the responsibility of preservation of our heritage.

When we examine the media on which the different objects of cultural heritage is made, we will find that that the media are of inorganic type, organic type and the last one consist of the materials like polythene, and different types of mixture like glass and ceramic, aluminum alloy, etc. The preservation of the objects made of the inorganic media included within the domain of Archivist and Museologist. On the other hand preservation of the objects made of objects made of organic media is the included in the domain of Archivist and the LIS professionals. Let us have a look on preservation area in LIS curricula.

LIS curriculum and issue of preservation:

The LIS schools in India are offering different levels of courses starting from certificate to doctoral degree. These are certificate course, diploma course, Bachelor degree, Master degree, M.Phil. degree, and Ph.D. degree. In case of Master degree program some universities are offering Master of Science and some are offering Master of Arts. In India there is

a wide discrepancy between the departments' educational levels as well as graduates' abilities. (Mortezaie & Naghsineh, 2002)

If we give a close look at the topics that are included in the LIS curricula in India can be categorized as foundation topics and auxiliary topics. The following foundation courses are included in LIS curricula

Foundation of Library and Information Science: The topics like library and society, types of libraries, principles and laws of library and information science, library associations and organizations may be included here.

Knowledge organization (Theory and practice): We have universe of knowledge, bibliographic description, methods of knowledge organization, theories of classification, theories of Cataloguing in knowledge organization.

Information and communication: Information science, communication of information, information management, knowledge management can be included in this course.

Information Retrieval: Subject indexing, indexing language and vocabulary control, information retrieval will find a place in this course.

Reference and Information Sources: We have to study different types of information sources, primary, secondary and tertiary sources, documentary and non-documentary sources in this course.

Reference and Information service: Reference service, information service, CAS, SDI, Bibliographic, Referral, document delivery service, Translation service can be included in this particular course.

Again, we may have the following courses in LIS curricula as auxiliary or elective course

Information Technology (Theory): Here study on basics of computers and computer architecture, operating systems, application software, DBMS packages, networking, internet basic tools, database management systems, library Automation, digital libraries can be included.

Management of Library and Information centres: Human Resource management, Financial management, application of System analysis and

design and Total Quality Management in libraries and information centres can be included in this course.

Research Methods: Research concept and types, research methods, research tools and techniques, data analysis and interpretation, bibliometrics, scientometrics and informetrics, research reporting should be studied in this particular course.

Applications of Information Technology: Database management systems, library automation, digital libraries and many other application of IT as well as ICT can be included here.

It is not always possible to include all the aspects related to documents starting from collection development, knowledge organization, application of ICT, preservation and so on. "Library science is a very wide field of study and should not be limited to one of its objects of study, as is sometimes supposed. It is possible, but undesirable, to design a syllabus which looks at only some aspects of the discipline" (Morales, 1995, 16). Therefore we should try to focus on diverse issues and topics related to LIS discipline to maximum extent.

The issue of preservation is not considered as a core component in the LIS curriculum though the libraries/ information centres/ the archives were established for preservation of the documents which are considered important for heritage preservation. The topics which are essential to study to have basic knowledge about preservation and conservation are concept and need of preservation, conservation, restoration. Preservation of different types of materials like preservation of manuscripts, preservation of book, and preservation of newspapers is another area to be included in the course. Other important topics are preservation of non book materials, digital preservation, preservation metadata, access of the preserved objects in online and offline format. Now, let us discuss how far the issues on preservation are given due importance in the courses on preservation in the LIS schools in North East India.

Comparative study of LIS curriculum in North East India in terms of preservation:

In North East India as of today eight universities (both central and state) are offering LIS different LIS programmes. The LIS education history

in North East India Started in the year 1966 with the establishment of Departement of Library and Information Science in Gauhati University in the capital city of Assam *i.e.* Guwahati. After that different universities in North East India started LIS programmes and today some private universities are also coming with LIS programme. In this study the private universities and those state/central universities where BLIS or MLIS programme is not offered have been excluded.

Table 1. Universities in North East India Selected for study

University and Type	Year of Establishment of University	Year of Establishment of LIS Department	Programmes offered
Gauhati University, Guwahati, Assam (State)	1948	1966	MLISc., M.Phil., Ph.D.
North Eastern Hill University, Shillong, Meghalaya (Central)	1985	1985	MLISc, Ph.D.
Manipur University, Imphal, Manipur (Central)	1980	1986	MLISc, Ph.D.
Mizoram University, Aizawl, Mizoram (Central)	2001	2002	MLIS, M. Phil., Ph.D.
Dibrugrarh University, Dibrugarh, Assam (State)	1960	2005	BLISc , MLISc
Assam University , Silchar, Assam (Central)	1994	2009	M.LIS, M.Phil, Ph.D.
Assam Women's University, Jorhat, Assam (State)	2013	2015	MLIS
Tripura University, Agartala, Tripura (Central)	1987	2016	BLIS, MLIS

Five universities among the eight universities are central university and the rest three are state university, all of which are from the state of Assam. Only three universities are offering MLIS, M. Phil., and Ph.D. programme; two universities are offering MLIS, Ph.D. programmes and three are offering BLIS, MLIS programmes.

Now if we do an analysis of the LIS curricula of the selected LIS department which are offering different LIS courses in North East India we observe that only five universities out of the eight universities are offering a course on preservation.

Table 2. Details of Course on Preservation in the selected universities in North East India

LIS Departnment	Course on preservation	Type of course	Course Code	Total Credit	Marks	No. of Units
DLIS, Gauhati University,	√	Core Course (CC)	LIS 2043	3	50	3
CLISS, Dibrugarh University,	X	X	X	X	X	X
DLIS,Manipur University,	X	X	X	X	X	X
DLIS, NEHU ,	X	X	X	X	X	X
DLIS, Tripura University,	√	Elective Course (EC)	1009	3	50	4
DLIS,Assam University	√	Elective Course (EC)	LIS405	6	100	5
DLIS, Mizoram University,	√	Specialization Course (SC)	LIS/3/SC/20A	4	100	4
DLIS, Assam Women's University	√	Elective Course (EC)	MLS 08	4	60	3

The topics included in the courses of the five LIS curricula are concept of preservation, conservation, and restoration, preservation of manuscript, preservation of newspaper, preservation of non-print materials, hazard to library materials and control measure, binding, digital preservation. But the scope and facility of practical exposure to preservation and conservation is totally lacking in the courses on preservation offered by the LIS departments in the four universities. The total credits of those courses are distributed among lecture/tutorial only. No course has the scope of practical component in the credit distribution.

In the LIS curricula of the departments of LIS in NEHU, Manipur University, and in the Dibrugarh University there is no course in the MLIS/ BLIS programme on preservation. However, in these LIS departments a few issues on preservation like Elements of Binding; Needs and Techniques of Preservation, Digital Preservation, preservation of collection, preservation of traditional culture and music, digitization for preservation in courses like Library Management, Collection Development, Digital Library are included.

Role of organizations and national bodies in preservation training:

It is observed that the LIS schools or the LIS departments alone cannot prepare LIS professionals for preservation and conservation works. They have some limitation regarding expert in preservation and conservation and proper laboratory to give training to the professionals. Therefore, we have to search for some other alternative. One of them is to approach some national level organization where the facility of conservation laboratory and experts are available. A brief discussion is presented below.

National Research Laboratory for Conservation of Cultural Property, Lucknow

The National Research Laboratory for Conservation of Cultural Property (NRLC) was established in 1976 under the Ministry of Culture, Government of India. NRLC used to carry out research activities on composition of materials, causes of deterioration, solution and treatment of the objects important for heritage in their laboratories. (http://www.nrlc.gov.in)

NRLC used to organize national and international conferences and workshops to prepare LIS professionals for preservation of heritage of our society besides publication of different types documents on preservation issues. In its three campuses (one at Mysore and two at Lucknow) it has given training hundreds of professionals in the field of conservation.

Indira Gandhi national Centre for Arts, New Delhi

Indira Gandhi National Centre for Arts was established in the year 1987 under the Ministry of Culture, Government of India. IGNCA has one conservation laboratory where the documentation and digitization of the cultural heritage are prepared. (http://ignca.gov.in/pg-diploma-course-at-ignca)

IGNCA is offering five diploma courses and 6 new Certificate Courses in art and culture and related subjects. The details of the five one year Post Graduate Diploma evening courses introduced to attract the people towards Indian art and to nurture trained manpower in the related fields, in the academic year 2018-19 are-

i. PG Diploma in Cultural Informatics (25 seats approved by the AICTE)

ii.PG Diploma in Preventive Conservation (25 seats)
iii. PG Diploma in Buddhist Studies (25 seats)
iv. PG Diploma in Digital Library and Data Management (25 seats)
v. PG Diploma in Manuscriptology and Palaeography (25 seats)
(http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1537836)

National Mission for Manuscripts (NMM)

The National Mission for Manuscripts was established in February 2003, by the Ministry of Tourism and Culture, Government of India. The basic objective of National Mission for Manuscripts is to locate, document, preserve and render the various formats of manuscripts available in our country these accessible

NMM has been organizing various levels of capacity–building in conservation through training and workshops. It has completed 218 preventive conservation programme, 20 curative conservation programme and 6840 manpower have been trained in these programme.

Also to increase the manpower on Manuscriptology & Paleography 59 basic level, 22 advance level and 54 Seminars have been completed by NMM. NMM has setup 57 Manuscript Resource Centres (MRC-s), 33 Manuscript Partner Centres. (MPC-s), 50 Manuscript Conservation Centres (MCC-s) across the country. (https://www.namami.gov.in/performance-summary)

National Archive of India

National Archive of India is also conducting some courses on preservation. One important short term certificate course is Care and Conservation of Books, Manuscripts and Archives of 8 weeks duration (July-August and November-December).

The course is designed to train personnel in the scientific methods of conservation, repair, rehabilitation, storage and handling of documentary heritage. The eligibility to attend the course is second class graduate from a recognized university, preferably in Science stream and should be below 30 years in age for private candidate, no age limit for sponsored candidate. Selection for the course is made on merit basis.

(http://nationalarchives.nic.in/content/short-term-certificate-courses)

Conclusion:

Practical knowledge about preservation and conservation is important for both printed and electronic/digital form of documents. It is not completely possible to provide both theoretical and practical knowledge of preservation and conservation in the LIS schools due to different constraints like lack of proper laboratory and lack of expert with practical knowledge of preservation and conservation. We can think about including at least one course in the LIS curricula with theoretical concept and prepare a group of LIS professionals those can be sent for further training in the different organizations and institutions which have the facility of laboratory training. We can not and should not ignore the issue of preservation and conservation in the LIS curricula so that the young LIS professionals feel confident to deal with preservation of our heritage of different documents and objects in any format and in all environments.

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Creative Commons: Progressive Tool for Sharing & Managing E- Contents in Digital Era

Leena Khullar

Introduction

In the present scenario of Information technology role of librarians have also changed. Despite managing information and knowledge via books, now days they are also creating the content, helping readers in searching online information and also participating in knowledge management process. All these online activities have to be monitored under some organization that can be Creative Commons. Creative Commons is a profitless organization that allows distribution of knowledge via free legal tools in the form of licenses. It has an objective of promoting openness by providing writers a technique to make it straightforward that their publications are accessible for utilization and re-utilization by placing it under copyright regimes.

Definitions of Creative Commons

WhatIs.com describes Creative Commons as "Creative Commons is a nonprofit organization that offers copyright licenses for digital work. No registration is necessary to use the Creative Commons licenses. Instead, content creators select which of the organization's six licenses best meets their goals, then tag their work so that others know under which terms and conditions the work is released". *(https://whatis.techtarget.com/definition/Creative-Commons-copyright)*

Dictionary.com defines it as "Creative commons. a set of various licenses that allow people to share their copyrighted work to be copied, edited, built upon, etc., while retaining the copyright to the original work

(often used attributively)" *(https://www.dictionary.com/browse/creative-commons)*

According to Techopedia "Creative Commons (CC) is a nonprofit organization that was formed in 2001 to provide free access to culture, education and research through the Web's open source platform".

(https://www.techopedia.com/definition/26920/creative-commons-cc)

Creative Commons is an institution capable of imparting free of cost and easy-to-access six copyright licenses to use, reuse and share the original writing of author.

Brief History of CC

Creative Commons came into being in the year 2001. Creative Commons is a profitless organization whose headquarters are situated in Mountain View, California. Its board of directors includes eminent personalities like cyber law expert James Boyle, Molly Shaffer, Van Houweling; a computer science professor at MIT, Hal Abelson, Davis Guggenheim, and public domain web publisher Eric Eldred. Students of Harvard and Stanford Law Schools have also provided great support in establishing Creative Commons. Now day's Creative Commons is situated in San Francisco's offices. Creative Commons is controlled via board of directors. Moreover it has a small group of administrative staff and technical team, which works under Technical Advisory Board. Earlier when CC was launched it didn't got much response then it was again relaunched in the year 2013 with Wikimedia India, Acharya Narendra Dev College and The Centre for Internet & Society.

Creative commons and copyright

In earlier times mostly one has to approach library for documents as there was no online open access process. Then came online but close access era. Now a days time has changed and one can opt for open access process. But with open access issues like copyright and plagrism have emerged which can be successfully solved via Creative commons. Creative Commons regulates the process of reuse of material. It has six copyright licenses which provide better options for sharing creative work and digital content, as compare to the traditional copyright criteria.

Structure of Creative Commons

Creative Commons provides unrestricted tools to help public in sharing their work online. These tools are an active provision for copyright holders. They are uniform, consistent and accepted everywhere in the world. In today's web driven society attribution is extremely important for every research project. Attribution is also significant for scholars in their respective fields of research. Young scholars want credit for their work so they can get jobs. Teachers and other faculty members want credit so they can get promotion and sometimes research projects too. So it can be said that attribution is the principle requirement for the authors for whom credit is important, and this is very well provided by Creative Commons. There are multiple versions of these licenses – in total there are four major condition modules that are being discussed below:

a. Attribution: Attribution means person using Creative Commons must acclaim and recognize the real writer (author). **Attribution** allows authors (writers) to copy distribute and remix original creator's writings, but he (original creator) has to be credited for the same.

b. Non Commercial: It permits Creative Commons to be used, but not for commercial purposes or for profit making without taking proper licenses.

c. No derivative works: Derivatives only allow users to download and share the original author's works only if credit is given to the original author or in other words name of original author is mentioned in it. **Creative Commons do not give authorization** to alter the original work in any way.

d. Share Alike: It requires that any new work is bound to be featured under the similar terms and conditions as the original writing (document). Anyone can use the original author's work even for commercial purposes under the identical terms along with proper licenses from Creative Commons.

Six licenses of Creative Commons

Creative Common licenses are outlines of how authors are permitted to copy, distribute, and make use of original author's work. They (CC licenses) indicate whether that particular work can be used commercially or not. Creative Common licenses also try to ensure that authors get the credit for their work. Given below are the six licenses one has to choose while publishing his/her work with Creative Commons:

1. Attribution (CC BY)

Attribution permits other authors to distribute, tweak and remix original authors creation, for profit making also. But for that they have to give credit to original author's creation. This license is considered as the most cooperative license as compared to all other licenses.

2. Attribution-ShareAlike (CC BY-SA)

Attribution-ShareAlike permits other authors to rearrange and change original authors work for profit making also, but with the condition that the commendation and recognition must be given to the creator of original work. Moreover they (other authors) have to license their new works beneath identical conditions and terms.

3. Attribution-NoDerivs (CC BY-ND)

This license allows reconstructing work of original creator for both profit as well as non-profit purposes. Only condition is that the works remain unchanged and the whole, credit is given to the original creator.

4. Attribution-Noncommercial (CC BY-NC)

Attribution-Noncommercial allows authors or writers to edit and modify the work of original author, but only for non-profit making purposes. Moreover their creations have to accept and appreciate the original author.

5. Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Attribution-Noncommercial-Share Alike permits authors to edit and modify the work of original author for non-profit making ventures. But the condition is that they must appreciate or give the credit of their writing to the original author and license their new work under similar terms as of the work of original author.

6. Attribution-Noncommercial-No Derives (CC BY-NC-ND)

Attribution-Noncommercial-No Derives allows users to replicate original author's writing and share it with others only if the credit is given to the original author. It has the limitation that neither the original author's writing can be changed nor it can be used for profit-making purposes. This is the most suppressive and constraining license among all other licenses.

All six types of CC licenses provided by Creative Commons allow users to share information and also provide fair use rights. Fair use culture is important in today's electronic environment in order to bring transparency and ethics in online publications. Its open licenses help the researchers to dissemination and share the research globally and that too free of cost.

Advantages of Creative Commons

Creative Commons licensed material is a valuable resource for each and every writer. It embraces original current written material available for use without charging any fees. The concept of creative commons is an emerging field so lots of misunderstandings are surrounded by it. To have a clear vision of it we must know the benefits of it, which are the following:

1. The ownership of copyright remains with the original author only.
2. It provides clear usage rights. That is what is allowed and what is not allowed is mentioned clearly.
3. It ensures that author gets reorganization for his work.
4. Authors are not debarred from making profit by selling their works, if they have proper license for the same.
5. Creative Commons does not affect the format of the publication.
6. The procedure of peer review also remains unchanged.
7. Creative Commons license cannot be modified. Author can only renounce the provided conditions or can get additional permissions.
8. Creative Commons-license can also be useful in creating bibliographies or technology guides.
9. Author can refuse his right to attribution if the work is not used in the proper way.
10. The Creative Commons license can be inscribed like an international license.

Disadvantages of using Creative Commons Licenses

Though Creative Commons licenses are the most popular licenses for open access publishing but once you license your work under Creative Commons then this license is irrevocable. That means you won't be able to cancel the Creative Commons licenses that you have applied to your work. If you requests to do so, even then your **earlier works** will remain under CC. Moreover by applying this license you surrender your rights free of cost. Any other person can interpret you work and can make money out of your work and you remain helpless. Some of the other disadvantages of Creative Commons are listed below:

1. Legally it is not clear that how the Creative Commons licenses would be explicate or interpreted in different countries.
2. In some context they are too generic to cater to all the relevant issues of writers.

3. Machine readable versions of the Creative Commons licenses, are not very much clear in communicating terms and conditions of Creative Commons.

4. These licenses are not in simple language. Before agreeing to its terms and conditions one has to understand them properly and clearly.

5. According to the policy of Creative Commons these licenses can be upgraded at any moment without any prior intimation to users.

6. Creative Commons disassociate itself from any problem that you might face after publishing your work or after using other authors work with its licences.

7. While putting your work under creative commons licenses you have to surrender your few rights that too free of cost. If someone earns profits from your work (provided you have not given a Non-commercial license), you can't ask for compensation or a license fee.

Creative Commons in India

Creative Commons was originally launched in India in the year 2007. At that time it was situated in IIT Bombay and Shishir Jha was its project head while the responsibilities of legal matters were in the hands of Lawrence Liang. But unfortunately at that time Creative Commons could not catch attention of research scholars, writers and public too. On 12th November 2012 it was again relaunched at Delhi via three agencies **Wikimedia India, Centre for Internet & Society and Acharya Narendra Dev College** of Delhi University. CC's unique feature is that instead of focusing on "all rights reserved" it laid emphasis on "some rights reserved" thereby providing limited access to authors and users who are using it and similarly limited rights to access the work by original author (creator of work) to use his work. CC licenses are boon for the copyright holders who want their work to be open accessed openly but without actually giving away all their rights to use their work. Three agencies involved with Creative Commons in Indian chapter are briefly discussed below:

Wikimedia India

Wikimedia India registered under the name "Wikimedia Chapter" is an autonomous and non-profitable organization. Its aim is to assist, encourage and educate Indian people in accessing and developing free and open educational contents online.

Acharya Narendra Dev College

Acharya Narendra Dev College is affiliated to Delhi University. It came into being in the year 1991 and is situated at Govindpuri (Kalkaji), Delhi. This college is primarily for sciences. Its vision is to provide education and create research-oriented hub of eminence in India with international standards.

The Centre for Internet & Society

It is a profitless research institution capable of making policy matters like freedom of expression, access to knowledge and IPR reform, accessibility for persons with disabilities and open access to scholarly literature.

The arena of Creative Commons in India will remain incomplete if the name of **Pratham books are not mentioned in it.** Pratham is a non-profitable children's publishing house. Its main objective is to publish online reading materials for children in open access scenario that means free of cost literature for children. It is successfully keeping its publication under CC licenses.

Conclusion

In today's information based society sharing the work without plagiarizing is a challenging task. To tackle this problem some organization is required that helps in deducting and solving this. Creative commons is such an organization. It is a profitless organization that provides an easy access to use the work of original author but under proper rules and regulation in the form of licenses. It has got variety of licenses for fulfillment of different types of requirements. Overall Creative Commons (CC) licenses expedite the authors work by providing other authors consulting that work of particular author liberty to use, share, distribute modify that particular work. So to conclude it can be said that all the six licenses of Creative Commons gives rights to fair use and share the work which goes hands in hands with Ranganathan's principal "Books are for use" in this knowledge driven society.

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Library Portal

Badan Barman

Introduction:

The libraries in their different phases of growth and development are trying to be customer focused by responding to customer needs and abilities. In the days of IT environment, the libraries are trying to achieve the same by developing their own website. However, day-by-day the library websites are overburden by a vast amount of link to external resources as well as link to in-house digitize materials. As a result, the users are increasingly found it difficult in following all the Web site's enhancements. This situation demands a dynamic restructuring of the library website. The dynamic restructure should be such that it should allow the individual user to create personal information systems that are responsive to their personal needs. The system also must empower the users to be a master in their own subject by customizing and personalizing it. This is what the library Presenting natiOnal Resources to Audiences Locally (portal) is going to achieve. Library portal provides the tools and services to manage the electronic resources of the library. The target resources may be the subscribed journals or databases, OA resources on the web or in-house digitize resources.

Ideally a portal may provide (a) single point of access (searching and browsing); (b) provision to narrow down the search (c) recommendations / related materials (d) scope for user contribution; (e) RSS feeds and (f) integration with social networking sites.

Portal: A personal portal is a site on the World Wide Web that typically provides personalized capabilities to its visitors, providing a pathway to other content. It is often necessary to have a centralized application that has access to various other applications within the same enterprise to share the information across the applications. Also the various users with different roles accessing the different applications prefer to have a single access point to all of them over the Internet. They like to personalize the applications and have the coupled applications coordinated. Above all, the administrator users like to have administrative tools all in a single place to administer all the applications. All these are achieved through portals. Since all the applications share information through portals, there is better communication between various types of users. Another advantage of portals is that they can make event-driven campaigns. The advantages of using portals are given below-

a) Intelligent integration and access to enterprise content, applications and processes;

b) Improved communication and collaboration among customers, partners, and employees;

c) Unified, real-time access to information held in disparate systems;

d) Personalized user modification and maintenance of the website presentation.

In a May 2001 ARL Scholars Portal Working Group Report define portal as "... a discovery tool that enables a user to search across certain limited but diverse and distributed websites, library catalogs, and databases of information resources to retrieve and integrate the results in a single presentation."

The European Library Automation Group (ELAG) 26th Library Systems Seminar on the theme of "Semantic Web and Libraries", held in Rome, Italy, in April 2002 define portal as "an application which allows one-stop-shop access / searching and discovery via a unified single-point interface to organized heterogeneous resources and enabling services to a pre-defined community (users)."

"A portal is a web site or web service that provides information content to serve a specific community" (Sadeh & Walker, 2003, p. 12). They further add "A universal aspect of Web portals, however, is that they allow individuals to receive news, find and talk to one another, build a community, and find links to other web resources of common interest".

"Web portals, as content aggregators, provide efficient access to information and services online: they are electronic gateways or entrances that provide numerous links to other sites and information that is needed. They provide a central concentrated focal point and an information source that can be personalized. They also allow people to gather detailed information and data as they need it and simplify access to information" (O'Murchu, Breslin & Decker, 2004).

Portal means some information retrieval services powered by some sort of search engine to meet the need of individual rather than to general. And the content residing in portal is generally hoped to be superior to the free content that are available over the internet. Web portal is a "single point, integrated, multi-channel, user-personalized, user-customizable internet site providing access to information, people and process" (Stoffel & Cunningham: 2005, p. 145).

The Joint Information Systems Committee defines a portal as "a network service that brings together content from diverse distributed resources using technologies such as cross searching, harvesting and altering, and collates this in to an amalgamated form for preservation via a web browser to the user".

Many portal engines uses complex probability and language analysis principles in order "to enable computers to extract meaning from text and to use that meaning to better categorize and deliver useful information" (Silberman, 2001). In the background, the portal creates a large database of documents, articles, and web pages based on the actual ideas in each piece of text. As the database is constructed, it incorporates probability and information principles to categorize the text content according to conceptual similarities.

Library Portal: Library portal is only a subset of web portal that are designed to serve specific academic and research communities. It acts as a gateway to the institutional resources (as such portals are also commonly called as gateway) by listing them for users by creating a direct link to the native interface of each resource. It is now considered as a standard interface to aggregate library resources and services through a single access and management point for users. According to Looney and Lyman (2000) library portal are "systems which gather a variety of useful

information resources into a single, one-stop Web page, helping the user to avoid being overwhelmed by "infoglut" or feeling lost on the Web".

"A library portal is a database application, accessible from a web interface, and governed by the principles and practices of librarianship" (Rozic-Hristovski, Humar & Hristovski, 2003, p. 149). The difference between a library home page and library portal is that "portals are user-centric, while home pages are owner-centric" (Rozic-Hristovski, Humar & Hristovski, 2003, p. 146).

In simple, a library portal is a unified single-point access to the personalized resources which are distributed and diverse in nature. Library portal improve communication, collaboration and empower a library user to develop their communities.

History of Portal Products: In the late 1990s, the web portal was a hot commodity. After the proliferation of web browsers in the mid-1990s, many companies tried to build or acquire a portal, to have a piece of the Internet market. The web portal gained special attention because it was, for many users, the starting point of their web browser. Netscape became a part of America Online, the Walt Disney Company launched Go.com, and Excite and @Home became a part of A T & T during the late 1990s. Lycos was said to be a good target for other media companies such as CBS.

Many of the portals started initially as either web directories (notably Yahoo!) and/or search engines (Excite, Lycos, AltaVista, infoseek, Hotbot among the old ones). Expanding services was a strategy to secure the user-base and lengthen the time a user stayed on the portal. Services which require user registration such as free email, customization features, and chat rooms were considered to enhance repeat use of the portal. Game, chat, Email, news, and other services also tend to make users stay longer, thereby increasing the advertising revenue.

The portal craze, with old media companies racing to outbid each other for Internet properties, died down with the ".com" flameout in 2000 and 2001. Disney pulled the plug on Go.com, Excite went bankrupt and its remains were sold to iWon.com. Some notable portal sites- Yahoo!, for instance - remain successful to this day. To modern .com businesses, the portal craze serves as a cautionary tale about the risks of rushing into a

market crowded with highly-capitalized but largely undifferentiated me-too companies.

First of all Herbert Van de Sompel and Patrick Hochstenback of University of Ghent together with their colleague, Oren Beit-Arie from ExLibris developed contextual linking to the point where it has become an international standard (as described by Stubbings in 2003). This can be considering as the beginning of portal movement.

Java in Administration Special Interest Group [Jasig in those days], a group of higher education technology leaders decided to explore the possibility that higher education could build a campus portal themselves, share it freely with anyone who cared to download it, base the technology on open standards, without proprietary vendor lock-in, and, at least in this domain, control their own software destiny. A core framework from vendor IBS started the team off. Soon afterwards, a three-year grant from the Andrew W. Mellon foundation, from 2001 to 2003, resulted in uPortal versions 1 and 2. Mellon later made additional funds available so that uPortal could support the emerging "portlet" standard for sharing portal content. By the time of the uPortal 2.5 release, hundreds of institutions, about half in the United States and half in Canada and Europe, had uPortal in production or in a phase leading up to full implementation. The JA-SIG community, led by schools such as Rutgers University, Yale, and the University of Wisconsin-Madison, formed a core of developers that continues to develop the application to meet evolving needs. In December 2012, Jasig and Sakai Foundation were consolidated as Apereo Foundation.

Need of a Portal Product: Van Brakel (2003) argues that "the average company Web site has reached its limitations and cannot address the modern day demands of the digitally literate employee". "The availability of "too much" information without organisation of access, is leading academic libraries and information professionals to acquire portal software and/or develop subject portals for all the academic departments in their institutions" (Ubogu, Kekana & Roberts, 2006, p.30). The library portal "systems can greet the user by name, recall their favourite information resources, store previous searches, link to full text articles from periodical databases and, when content is not available, link to the OPAC and allow the users to request interlibrary loans" (Ramsden, 2003, p.17). The need of portal product can be felt for the following reasons.

a) Single Interface: The Online Public Access Catalogue (OPAC) has been limited to searching physical texts and sometimes digital copies but has only limited special features. The electronic resources subscribed by the libraries have their own default search engines. Again, the different electronic resources provide different search and retrieval interface to the user for accessing its resources and as a result "the current process of accessing several resources for the sake of seeking information is cumbersome and requires some knowledge of the various resources, their access mechanisms, the query interface they provide, and the type of results they return" (Sadeh & Walker, 2003, p.11). The system also requires a manual comparison between the results returned from several resources. To locate and find useful material a user at any point need to go through all these which is a time consuming and cumbersome job. So, the library needs to provide an interface that can provide the facilities to search physical as well as subscribed digital resources together. The library portal is the solution to this problem. It will provide a single point of access along with a web based OPAC to all subscribed full text journal and databases, important OA resources over internet, resources accessible by virtue of institutional affiliation, etc. that is "the familiar portal interface is an option for searching databases that are unfamiliar to the user" (Cox, 2003, p. 38).

b) Single Log In: "Users can be overwhelmed by the number of resources and the problem of multiple log-ins and search interfaces in an online library environment" (Ramsden, 2003, p.17) that need to be eliminated with a single log in for all resources. When user searches with multiple databases, they frequently become annoying of demotivating multiple login option. But, as library portal system handle authentication they can reduce the barrier of users having to remember multiple login.

c) Personalization: This is the age of personalization where everybody feel the need to be unique, whether it is the case with his/her dress designed as single piece in the world by professional designer or a search engine that will only search the resources that is relevant to his / her personal need. Library portal serves this need by giving the provision of extensive customization facilities to the user. It assists users in selecting a particular type of resource for searching. According to Lakos and Gray (2000) "customisable and personalized library portals tend to be customer focused, responding to customer needs, and empowering users to create

personal information systems that are responsive to their individual needs". Customization and personalization means the ability of the portal to deliver content based on the user create profile and to allow the user to change his/her profile. The portal provides the library patrons with the facilities of personalized access to information and determine their own path which resource to choose for search and which to avoid. They can also save searches, store their favourite databases for quick access and reuse. "Some users might prefer to restrict searches to content where full text is available locally" (Cox, 2003, p. 39). Generally users select item for displaying from an initial set up screen that comes after first registration with the portal. Users can later adjust the personalization further by editing the already set up screen. Each and every user can add and delete categories, add more databases and web server without disrupting the portal service, search and gather information and add content to the knowledge base which will be visible to the user's community. Moreover, the user can create new relationships regarding available data to administer a particular view on some subject within the knowledge base. The portal will also provide the user to receive news, find and talk to one another, build a community and finds links to other web resources of common interest.

d) Metasearching Tools: A metasearch engine or aggregator is a search tool that uses another search engine's data to produce its own results. The Metasearching tool aid in the discovery process and eliminate the need to search different databases individually. Library portal "provide federated searching and information retrieval of descriptive metadata from multiple, diverse target resources, including but not limited to commercial or licensed electronic resources, databases, Web pages, and library catalogs" (The Library of Congress, 2005).

e) Browsable Interfaces: The pre-clustered resources can also be browsed by subject, title and so on.

f) Link to the Full Text: The libraries which can afford the base cost of the portal products, the return on investment is justified by maximized usage of key quality electronic library resources (Ramsden, 2003, p.17) as the retrieved results lists are link to full-text or other content delivery options that might be of interest to the user.

g) Inter-Library Loan: Library portal provide facility for interlibrary loan (ILL) or document delivery, for material the library does not own.

h) Citation Management System: The library portal may also provide the facilities to manage the citation.

i) Virtual Presence: Libraries have always functioned as physical portals to physical information. But, day-by-day users have become more aware of the importance of virtual presence of the library, users computer literacy also become significantly increase which forces the libraries to give focus "on their virtual online portal presence even as they maintain physical environments and operations" (White, 2002, p.224). The library portal support the parent organization to digitize its own collection, host it for local as well as remote searches i.e. searching through the local library portal as well as searching through other library portal.

j) Dynamic Library: "On the one hand, libraries should look to the future and make use of the latest information technologies in order to supply people with the latest information. On the other hand, it is their task to preserve the treasures of science and culture accumulated in the past and to make them accessible to future generations, so that they can build upon these "Geistesschatze" of the past" (IFLA Express, 2003). In the portal environment the user can save (download, printing, Emailing) and export search results.

k) Interactive: "More and more universities and colleges invest in distance learning programs, traditional face-to-face instruction is being supplemented or superseded by several browser-based and e-mail-related interactions" (White, 2002, p. 225) that in turn deserve that the services of the libraries should also be accessible through distance mode.

l) Save the Time of the User: A portal provides access to a wide range of heterogeneous resources that do not share a common Meta data standard or search and retrieval techniques, thus saving the time of the user that otherwise need to spend to move from one resource to another.

m) Removed Duplicate Result in the Retrieve List: In many library portals among the retrieve results the duplicate entries are removed by matching on numeric indicators such as ISSN or ISBN.

n) Explores the Deep Web: The search capability of library portal deals with the deep web, by drilling down into database content that the standard web search engine unable to reach.

o) Resource Discovery: Library portal helps user in identifying relevant quality based resources in a subject area. Uses of Open URL

protocol in library portal automatically makes connection between the retrieve list of results and the full text of the resources if it is subscribed by the institution concerned.

p) Enhanced the Content of Bibliographic Record: The content of bibliographic record can be enhanced by including a table of content, abstract, cover image of the article, or with a link to other resources so that, the users of the library catalogue can be guided to encyclopedia or approved web resources of the portal.

q) Generation of Statistic: With the introduction of portal the user details could be recorded when they log into the system, it also enables the library to gather statistics on the use of electronic resources.

r) 24 Hour Access: Library portal provides virtual access to the library that means the collection and services of the library would be available 24 hours a day and for seven days a week.

s) Controlling the User: Portal helps in managing access to target resources and portal functionalities for authenticated user communities based on various user classes and roles. Users are shown only the resources that the authorization rules set by the library permit them to see. Library portal "increases the ability of the library to ensure that costly electronic journals and databases are used" (Cox, 2003, p. 38).

t) Maximize the Use of Print Holding: In searching over the library portal, in response to a particular query, the system will retrieve a list of resources which also include resources from the library's print holding, these are the resources which are not available in electronic format, so the user automatically bound to face their hand towards the paperback volumes.

u) Distance Access: With the introduction of portal any user can access the full text subscribed journal and database of the library collection from any geographical location by just login to the system.

Problem in Developing Portal: The problems in developing library portal can be grouped into the followings-

a) Low Portal Literacy: The concept of library portal that appear in the late 1990s is not popular yet. "By the end of 2002, five years after appearance of the first library web portals, there were only about a dozen library web portals in operation in the US" (Zhou, 2003). In a discussion of library portals at the 2002 American Library Association Midwinter Conference, the highest recommended portal adoption rate was 10 per

cent (Crawford, 2002). According to Pienaar (2003), the limitations in user literacy is the impediment to the portal channel development.

b) Difficulty in Studying Portal in Work: Studying the portal in work is a difficult task as access to the most of the library portal in operation is password protected. The portal those provide guest logins, the contents that can be viewed by guests was typically much less than the content available to the password members. This is another impediment in portal development.

c) Cost: Portal cost much in terms of software, staff resources and training. So, many libraries prefer to use their fund in procuring resources than to spend it in providing access mechanism to those resources.

d) Lack of Regional Language Setting: A majority of the portal product only supports English language, if one wants to add other regional language features, then the costly product again will be more costly.

e) Lack of Open Source Library Portal Software: By considering the cost factor of the portal product the library are bound to look for product that are release under GNU public license as open source code so that it can be customized to the local need by avoiding its high cost and can be obtained freely by way of downloading from the web. But, development in this direction is also slow.

f) Increase Rate of Downloads: "If time is limited so is money: future full–text downloading may also be limited by pay-for-use charging mechanisms. This would make any anticipated increase in full-text downloading an unlikely measure of portal effectiveness". (Joint, 2005, p. 340).

g) Too Much Information: Boss (2002) considers that one of the drawbacks of portals is that they can bring too much information to the users and as a result they may be lost in the ocean of information.

Portal Vendors and their Portal Products: There are different portal vendors that release a wide spectrum of portal products with different functionalities. The Library of Congress Portals Applications Issues Group (2003) lists a few portal vendor and their products. According to the report of Cox and Yeates (2003) and the online newsletter, Biblio Tech Reviews the best sources of information on the product of library portal comes from the suppliers own web sites. In mid 2002 Ex Libris and Fretwell-Downing Informatics (FDi) were the market leader among the library portal software. However, a leading academic institution portal framework is uPortal by

JA-SIG (presently Apero). Some of the popular Portal Vendors and their Portal Products are listed below.

a) Jetspeed: Jetspeed is a platform for launching Portal which is written in Java and XML and based on open standards. It is released under the Apache license. The user can access the portal via a web browser, WAP-phone, pager or any other device supported by the servlet engine. The latest version of Jetspeed is 2.3.1, released May 9, 2016.

b) IBM WebSphere Portal: IBM WebSphere Portal was initially release in 2001, the latest version 9.0 was released in December 2016. It is enterprise software used to build and manage web portals. It provides access to web content and applications, while delivering personalized experiences for users.

c) Millennium Access Plus (MAP): Millennium Access Plus (MAP) is a method for organizations to manage access to information resources, providing patrons and staff with quick access to Internet content while protecting the rights of library and content providers.

d) uPortal: uPortal is a Java-based framework for creating enterprise web portals. It is sponsored by Apereo [formerly Java Architectures Special Interest Group (JA-SIG)], a consortium of educational institutions and commercial affiliates sponsoring open source software projects focused on higher education. uPortal is free and open source software under the Apache License 2.0 and available on the Apereo web site. Kumamoto University (http://uportal.kumamoto-u.ac.jp), Université Paris 8 (https://e-p8.univ-paris8.fr), Southwestern University (https://my.southwestern.edu) are using uPortal.

e) Jahia: Jahia is a Web Content Management System (WCM) with a user interface built using Google Web Toolkit and stores its content using the JCR API default implementation Apache Jackrabbit (an open source content repository).

f) JBoss Enterprise Portal Platform (JBoss EPP): JBoss Portal provides an open source platform for hosting and serving a portal's Web interface, publishing and managing its content, and customizing its experience. The JBoss 2.7.2 was released in March, 2009.

g) GateIn: The GateIn project is a merger of JBoss Portal 2.7 and eXo Portal 2.5 that produced GateIn Portal 3.0, and also the related projects GateIn Portlet Container, eXo JCR, and JBoss Portlet Bridge.

h) Liferay Portal: Liferay Portal was created in 2000 by chief software architect Brian Chan to provide an enterprise portal solution for non-profit organizations.

i) Metadot Portal Server: Metadot is an open source portal and content management software used to create websites, intranets, extranets, project and team spaces anyone can use. It is available for free under the GNU General Public License (GPL). It provides collaboration, content management as well as My News Page (like My Yahoo) and online database applications.

j) SharePoint: SharePoint is a web-based collaborative platform that integrates with Microsoft Office. Launched in 2001, SharePoint is primarily sold as a document management and storage system, but the product is highly configurable and usage varies substantially among organizations.

k) Oracle Portal 11g: Oracle Portal 11g offers a complete and integrated framework for building, deploying, and managing enterprise portals running on Oracle WebLogic Server. Oracle WebCenter Services provides horizontal enterprise-ready Web 2.0 services that enable a collaborative and composite environment and enrich the end-user experience with context-aware enterprise portals.

l) Oracle WebCenter Suite: Oracle WebCenter is Oracle's portfolio of user engagement software products built on top of the JSF-based Oracle Application Development Framework. It connects people, processes, and information with the most complete portfolio of portal, content management, Web experience management and collaboration technologies.

m) SAP NetWeaver Portal: SAP NetWeaver Portal is one of the building blocks in the SAP NetWeaver architecture. With a Web Browser, users can begin work once they have been authenticated in the portal which offers a single point of access to information, enterprise applications, and services both inside and outside an organization. The portal provides access to business processes and information, social collaboration and content management across various consumption channels.

n) SirsiDynix® Horizon™ 7.5 and Horizon Information Portal™ 3.20: SirsiDynix® Horizon™ 7.5 and Horizon Information Portal™ (HIP) 3.20 software release supports crucial database upgrades and infrastructure improvements to both Horizon and HIP.

o) Open Text Team Site: OpenText TeamSite is an enterprise web content management system developed by Interwoven. At present, it is owned, maintained, marketed by OpenText.

Name of the Vendor	Vendor Website	Name of Portal Product	Type of License
Apache Software Foundation	http://portals.apache.org	Jetspeed-2	Apache License
Apero	https://www.apereo.org/projects/uportal	uPortal	Apache License v2.0
IBM	https://www.ibm.com/in-en/marketplace/ibm-digital-experience	WebSphere Portal	Proprietary
Innovative Interfaces Inc.	https://csdirect.iii.com/manual_2009b/gmmap_map.html	Millennium Access Plus (MAP)	Not Available
Jahia Software	https://www.jahia.com	Jahia Portal	GNU General Public License
JBoss	http://jbossportal.jboss.org	JBoss Enterprise Portal Platform (JBoss EPP)	GNU Lesser General Public License
JBoss	http://gatein.jboss.org/	GateIn	Not Available
Liferay	https://www.liferay.com/solutions/partner-portals	Liferay Portal	GNU Lesser General Public License and Proprietary Licenses
Metadot	http://cms.metadot.com	Metadot Portal Server	GNU General Public License
Microsoft	https://products.office.com/en-in/sharepoint	SharePoint	Commercial
OpenText Corp.	https://www.opentext.com/products-and-solutions/products/customer-experience-management/web-content-management/opentext-teamsite	OpenText TeamSite	Commercial
Oracle	https://www.oracle.com/technetwork/middleware/portal/overview/index.html	Oracle Portal 11g	Commercial
Oracle	https://www.oracle.com/technetwork/middleware/webcenter	Oracle WebCenter Suite	Commercial
SAP SE	https://www.sap.com/products/enterprise-portals.html	SAP NetWeaver Portal	Commercial
SIRSI Corporation	http://www.sirsidynix.com/press/horizon-7-5-and-horizon-information-portal-3-20-released	SirsiDynix® Horizon™ 7.5 and Horizon Information Portal™ 3.20	Commercial

Table 1: Different Vendors and their Portal Products

Criteria in Selecting Library Portal Product: "The first libraries using the systems seem genuinely excited by the enthusiasm with which they have been greeted by users" (Cox, 2003, p. 41) but, as the development of portal is still new therefore before introducing a portal its need to be evaluated. "There are a number of portal products and solutions in the library marketplace, many of which have been developed by Library Management System (LMS) suppliers" (Ramsden, 2003, p. 17). However, "there remain some issues with suppliers' compliance or implementations of Z39.50 and the OpenURL" (Cox, 2003, p. 39) that determine the critical point in evaluating the value of the portal. Again, for the development of library portal each and every vendor of software attempt to develop its own unique method of categorizing, searching, presenting, securing and updating the software. Sullivan (2001) has recommended five principles which can define efficient display and access policies to electronic information. They are (a) be able to manage unstructured data through the use of metadata rather than via the original content; (b) be able to provide access to content through user-specific presentations; (c) be able to control access to electronic content through the creation of administrative and public "areas"; (d) be able to support improved and varied searching techniques; and (e) be able to provide updated and current electronic content in a timely fashion.

The criteria for selecting the portal products can be outlined as follows.

a) Compliances with Existing Standard: The portal product must compatible to the search and retrieval standards, including Z39.50 and Z39.50-International: Next Generation (ZING), the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), and OpenURL. It may build on open standard like Java and Extensible Markup Language (XML).

b) AuthCate: The portal must have the facility to log user to the system. Some kind of authentication software (such as Web Access Management (WAM) provided as part of MAP) is a point to be considered in selecting any portal product. The user must access the resource without further login to the subscribed journal and database. That is the subscriber journal or database must automatically authenticate any user whose referring URL is the portal server.

c) OpenURL Protocol: After the search is complete the portal software must use the NISO OpenURL standard protocol to carry the user from the search result list or bibliographic database to subscribed full text of the journal article, if it is available. If the full text is not available it must automatically link to the inter library loan request.

d) Single Interface: Portal must have the facility to act as a single point of access, cross reference searching tool regardless of search protocol i.e. Z39.50, http, ODBC, SQL and metadata i.e. MARC, DC or just the database suppliers data structure.

e) Browsable Categories: The portal must have the facilities to present all information resources added to the portal into some browsable categories by subject or discipline name, library classification or alphabetical listing.

f) Standardize Display: To gives portal credibility to the eyes of the user, in searching library catalogue, open access resources, subscribed journal and database, the portal must returned identical result.

g) Individual Profiles: The system should present a set of resources based on the user profile, it must have the facility to pushing the most relevant resources to the user. However, the user must not to be intended to the limited resources chosen for them by the library professional. All users must given access to all resources so that they can pursue research on any topic. The system must have the facilities to create profile for a group of people having common interest and must also have the facilities to allow the user to modify their individual profile by adding their own favorite resources. In addition, the portal must also enable user to store searches and sign up for alert to new resources to the portal.

h) Resource Linking: Resource linking allows the library to link between the index and abstract of a database with its full text link. Such linking will provide the user to find same information by following multiple paths and the scope for it must be provided by the portal software.

i) Powerful Search Engine: The portal should have a powerful search engine. Interoperation with other gateways and systems, such as institutional portals, or virtual learning environments to provide search and linking to library organized resources from within a department or course web site, supporting the new protocols such as Open Achieve Initiative (OAI), metadata harvesting, etc can be treated as primary need.

j) Present Status is Important than Future Prospect: Many portal products bears promising future, but in choosing the library portal, the library should see what is the present status of the product.

k) Generation of Different Statistic: The portal software should generate statistics as who has used which database, turn ways, downloads? Etc.

l) Speed: The portal must enable the libraries to set up their portal rapidly, taking advantage of the central knowledge base. The library portal must retrieve any number of target resources without requiring prior programming for each target resources.

m) Flexibility: The portal must have a wide range of customization facilities. Individual libraries must add their context and administrative requirement to it. The portal must work efficiently in the environment where standard are lacking but at the same time also bear promising facility to cope up with the promising semantic web.

n) Easy Managing: The virtual collections that are created in the administrative interface must provide drag and drop or some other easy way of managing.

o) Price: Many portal products are very much expensive and since price is a dominating factor in choice so it must rigorously determine "whether significant money is better spent on resources than on making them a bit easier to use" (Cox, 2003, p. 40). Each and every library system demands some sort of customization of the original library portal software. The cost of library portal system depends upon such customization factor. It depends upon the number of expected staff, number of simultaneous user, total collection of the library, and so on. "The cost of the systems is high, though there is great scope for negotiation and discounting, particularly as these are still fairly young products and suppliers are prepared to offer favourable terms to pioneering clients" (Ramsden, 2003, p. 24).

p) Open Source: If possible, the library should select portal which are released under GNU Public license, Apache License or similar license. It will provide several benefit to the library- firstly the portal software will be free, the operating system to run such software will also be free without a need to purchase licenses. If one feel the need to go for portal software then his/her priority should be to go for open source portal softwares for mutual benefit as after implementation, the implementing agency may do code enhancements that if again shared might benefit all participating institutions.

The portal engines must also have the facilities to create personalized content, enable a portal user to see a visual representation of the relationship existing between the results of their content queries, form online communities, subject channel, maintain search history, and create individual profile of each user and so on.

Steps in Introducing a Portal: The selected portal product may go through the following steps for its implementation in the libraries.

a) Trialing of Portal: After selecting any portal product the library first need to request proposal from the portal vendor for a proper presentation and demonstration then only, the library should sign the contract with the vendor for a trial. If trial runs successful then extension to its full implementation should be considered. The trial must allow for the library to withdraw from the contract if it does not meet the requirement.

b) Customizing the Existing Portal to Meet the Local Need: "When deploying an already developed system, the majority of the hard work has already been done" (Rozic-Hristovski, Humar & Hristovski, 2003, p. 149). However, the library should look to the professional hand to further customization of the product to meet the local need.

c) Identification and Selection of Resources: Selecting the resources that need to be personalized to meet the needs of library patron and which will remain static i.e. constant for all category of user is the first point of consideration after customization of the portal product. The static information will includes opening hours of the library, staff information, circulation policy, library rule, and charge for different types of services, etc. In simple the information that are not of interest to all users require the personalization.

d) Contents Identification of Library Portal: Many library portals provide alphabetical listing of the resources by site name. They are frequently enriched by a search engine which also acts as a tool for resource discovery. According to Karvounarakis, Christophides & Plexousakis (2001) in order for a web portal to be successful "it must be a starting place for locating interesting content. Typically this content is submitted by members of the community, who often index it under some subtopic, another means of collecting content relies on the content providers tagging the content with information that can be used in syndicating it". The tagging involves the creation of simple tags that identify the topic of the content. The default

result should also be defined clearly that will return when a search term in the portal will produce null results.

e) Presentation of Information over the Portal: Many libraries organize their in-house collection searchable by maintaining a database of all e-resources. These collections can be search and browse according to title and keyword. The subscribed e-journal and e-databases collections should have the provision of browsing according to subject or keyword specific pages. Another option is to create alphabetical listing according to journal name or publisher.

f) Publicizing the Introduction of Library Portal: As soon as library portal is introduced it must be advertise to the faculties, research scholar, staff and most primarily the library patron through Email. They must also need to be invited for a hands-on sessions. If feel needed the user must provide training regarding how to use the library portal more effectively.

g) Marketing: By introducing library portal the library can think to extend their services to all alumni of the institution, and can charge them with the recurring cost of the portal. This will be good marketing place, if think seriously.

h) Maintenance: The faculty members / programme coordinator / course coordinator / instructor should regularly search for resources in the library portal and then paste them into a course website, this will implies that the resources need not to be download and save it locally, the user those have the access to the portal will automatically get the resources and those that do not have the access cannot be able to access the resource. The other point to be considered in maintenance is the introduction of the concept of Feedback from the user of the portal. In order to get feedback, each page of the portal should contain links to feedback form including the home page. Another point to consider is the keeping track of journal holding regularly.

Conclusion:

These are the days to develop subject based system that meet the need of subject based resources rather than multidisciplinary cross searching tool, such as Google. So, considering this in the coming days it is hoped that each and every library would make a vision of using the library portal as a

gateways to the libraries services, online help and so on. It is again hope that it will replace the static library web site and dominant among the 21st century technologies that need to be considered by the libraries.

Portal provides the solution to many problems the libraries are facing with the proliferation of the electronic resources. The increasing technical and computer literacy of the users are also forcing the libraries to go for the costly portal presence. One of the main forces behind introduction of library portal is the real time support to the user. That is the creation of environment where the library user can access to the library resources and services when they need it, at any point of time and from any location. Introduction of portal in libraries really will make it a virtual one.

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22

Technological Influence in Academic Libraries: An overview on Technostress Among Library Professionals

Sumaira Jabeen
Shabir Ahmed Ganaie

Introduction

Today Information Technology is the fastest growing industry in each corner and everyone, is facing tremendous competitive pressure in digital environment like in business, schools, universities and in our lives also. With the advent of IT such as computers, laptops handheld devices, satellite systems, internet and wireless gadgets have been introduced as the key issues of the digital world. Even many problems arise with the advent of any new technology. One of them can be identified as Technostress. It was first defined by Brod (1984) in a more formal manner. He defined it as "a modern disease of adaptation due to an inability to cope with the new computer technology in a healthy manner". However the main symptom of the person who is terrified with computer is anxiety, which is expressed in various ways like backache, irritability, headache and hesitate to use technology. As stress is a natural perceived phenomenon related to tension and anxiety. It is defined as an emotional and physiological reactions resulted from the response to challenging demands (Greenberg,2005).The phenomenon of computer related stress or "technostress" is also labelled by researchers with various other terms like technophobia, cyberphobia, computerphobia, computer anxiety, computer stress, negative computer attitude and computer aversion (Flores, 2012).Ragu-Nathan, Tarafdar, Ragu-Nathan and Tu(2008) defined technostress as a problem of adaptation

resulting from an employee's inability to cope up or to become used to ICT.This phenomenon that create this potential of ICT adaptation problems are known as technostress creators. These creators are related to ICT circumstances or factors that have the potential to create ICT or job related stress among the individuals. Such creators are frequent software updation, hardware problem, continuous information overload and expectations of constant connectivity. Despite of this fact, Tarafdar, Tu, Ragu-Nathan and Ragu-Nathan (2007) suggested the five components of technostress creators which are described as:

a) **Techno-overload:** A condition where ICT users are forced to work with high-speed and in an extended time.

b**) Techno-invasion:** A condition where ICT users feel that they can be contacted anytime or continuously connected which caused an unclear boundary between work-related and personal contexts.

c) Techno-complexity: A condition where the ICT users feel that their skills are insufficient due to the difficulty related to ICT. As a result, they are strained to use up time and effort to study and understand the diverse features of ICT.

d) Techno-insecurity: A condition where ICT users feel threatened that they will lose their job, either being reinstated by the new ICT or by other people who are better in ICT compare to them.

e)Techno-uncertainty: A condition where the ICT users feel hesitant and disturbed since ICT is endlessly shifting and need upgrading. Each of the five components has a capacity to increase ICT related stress among employees.

Technostress in Workplace

To keep pace with the changing ICT and the higher expectations of productivity Professionals have to renew, update their skills and enduring pressure from this complex system. On the other side presently more and more technologies are placed on professionals desktop, with the result the technostress level may also increase while the organization productivity and work efficiency may suffer (Tu, Wang, & Shu, 2005). Besides this, the use of sophisticated information technology continues to become common place in libraries in the new millennium,as it has made possible many exciting new opportunities in managing and using library.Along with the impressive achievements in streamlining library operations, improving library services

.Information technology (IT) also produced a set of new intellectual, psychological, physical and social barriers to effective library development. It is also true that adoption,utilization,rapid diffusion of ICT in teaching and research have brought a number of demands and challenges among library professionals such as technostress and job burnout in workplace. Currently, our society isattacked with what might be called as "mythology of stress", which means that one's psychological as well as physiological well- being is constantly threatened by the degree of stress and anxiety(Ramana, 2013).Ragu-Nathan, Tarafdar, Ragu-Nathan and Tu (2008) found that the hurried look around us may be big and small events happening in life can cause stress. These are excessive workload, working conditions, time pressure and a few instances of stressful events that people experience in every aspect of modern life. However librarians greatly rely on technology to carry out their routine operations that may evokes the negative opportunities and stress among professionals. Even there is a desire of every library professional to excel in an ICT based library environment may cause technostress.Thus, it may be experienced by the library staff due to the intensive use of ICT particularly to offer information service to the patrons. The various types of stress have been classified by the researchers, work related stress is considered the major cause for being stressful.i.e.,"technostress".

Impact of Technostress

In 21st century, the use of ICT has become a necessity in every sphere of individual's life. Earlier the application of ICTs were mostly restricted to organization, but with the development of ICT the scope now spread into organizational and personal spheres also.These technological advancements force individuals to adjust to the use of ICT and ranging from integration of ICTs into workplace, to the fear of becoming obsolete, to the phenomenon of technostress (Ayyagari, Grover & Purvis, 2011). Various studies have been carried out on how ICT in libraries contributes to technostress in delivering library services. Among such study was conducted by Kupersmith (2003) found that 59% librarians experienced technostress while rendering library services to users ,34% felt that it has not changed much in them and only 4% believed it has decreased in their respective libraries. The survey also revealed that 65% of the librarians reported that technostress is a serious problem, 8% said it is very serious,

while 27% felt it is not at all serious.Technostress among professionals in workplace were also found to arise from organizational factors. In libraries, inadequate staff and insufficient number of hardware, terminals and work stations which caused the librarians to share equipments were more likely to lead to frustration and stress. Bichteler (1987) reported on technostress in libraries, examining some of the fears, frustrations and misconceptions, which hamper the effective use of computers. Technostress among library staff members may result from poorly designed workstations, inadequate training and inept planning and implementation on the part pf management. Both staff and users may suffer from fear, insecurity and general apprehension of new technology. Managers can take a variety of approaches to alleviate technostress in staff and patrons. Furthermore, Statham and Bravo (1990) suggested that loss of control and intensifying job pressure often center around the introduction of new technologies and are associated with stress and physical problems. They mention better communication, better staff training, staff involvement in training in planning, and careful timing of installations as some ways to prevent health problems.Harper (2000) stress out that there are two forms of technostress that affecting the librarians namely the physical and the psychological forms. The physical form of technostress include headache, backache and feeling tired .Psychological form of technostress include feeling drained, information overload, feelings of job insecurity.There were also the feeling of jealously among librarians when their level of knowledge and technological competencies are differ from other and resulted in the loss of motivation and team spirit.Agbu and Simeon (2011) found that the occupational stress is one of the major challenges of today's technological revolution in the workplace. It is also found that technostress is a feeling of anxiety and it has negative impacts on thoughts, attitude, behaviour and body of a person who uses the technology. Occupational stress in academic institutions have been negative impact on employees satisfaction and has been found that higher level of stress leads to lower organizational commitment and satisfaction (Ahmad,Amin & Ismail,2009).The studies showed that technostress is higher among the employees who use technology in accomplishing their tasks (Schuldt & Totten, 2008 ; Agbu & Simeon,2011).Technology is a tool for organizational work effectiveness and efficiency, which will be worthless without the dedicated employees.

It can also create stress in the workplace and recognizing the influence of stress on organizational commitments. Employees who showed dedication towards their work found higher performance, lower turnover and absenteeism rate, higher productivity and higher satisfaction (Lewicka, 2011).With the introduction of new technology that will lead to the feeling of job insecurity which will turn result in high level of anxiety and stress (Veitez, Carcia & Rodriguez, 2001).MoreoverRafter (1998)suggested that thosewho did not welcome technology in the workplace, they not only suffer from insomnia but also shown a decline in productivity.Due to the ICT revolution in the organization, the library is one of the among that affected with the technostress. Although, ICT in the library has helped in order to increase the efficiency and work productivity of library services, it has also caused a tremendous amount of technostress among librarians (David – Millis, 1998; Kupersmith, 2003). Infact, librarians are comfortable with automation and shows positive response towards technological change in the libraries, at the same time library professionals shows concern with regards to the negative effects brought by the technological change (Al – Qallaf, 2006; Poole & Denny, 2001).According to the Van, Fleet and Wallace (2003)found that with the outline of technology in the library has caused some professionals to suffer loss of identity and feel more vulnerable. Similarly, majority of the library professionals felt that technostress has increased over the years and causes serious threat (Kupersmith,2003).Pors (2003) expressed that there is a strong relationship between the librarian's job satisfaction and the technostress level and other demographic items age gender and experience. Most of the professionals revealed that the technological advancements have developed technostress

Causes of Technostress

Recent research shows that today technostress is still a growing phenomenon among the library and information science professionals (Ahmad, Amin & Ismail, 2014).Although the library professionals working in libraries has been considered as a stress free job as compared with other different professions, various studies have been conducted in the past which focused on stress experienced by library professionals in their workplaces (Topper, 2007).There are various factors such as a heavy workload, interpersonal relationship, lack of cooperation from supervisors, co-workers and patrons, ambiguity in clear policy guidelines, lack of office space and

lack of resources can cause technostress in the work place and eventually affect the job productivity of the professional (Bunge,1989).A study was conducted by Clute 1998 as cited in Ahmad and Amin (2012)listed out the top three reasons of technostress are inexperienced with computers, performance anxiety and lack of training. He further found some other causes of technostress include ineffectiveness of communication, lack of management support and inadequacy of employee's involvement.Al –Qallaf (2006) carried out the study on the effect of ICT on the academic and research librarians in Kuwait, and found that lack of formal training among library professional was one of the main cause of technostress. She further reported that professionals are not satisfied with the quality of the training programs. Gorman (2001); Kupersmith (1992) found that the information overload,rapid rate of change in technology Poople and Denny (2001); Vanfleet and Wallace (2003); outdated computer equipmentHudiburge (1996) is a main contributing factor of technostress in libraries, others include lack of training, changing role of libraries, excessive workloads, outdated computer skill and software. Similarly, Fudail and Mellar (2007) revealed the causes of technostress among professionals include, inadequate staff, lack of technical support, growing user demand, information overload; insufficient training sitting infront of computer for long periods(Owolabi, Aregbesola &Oyesola,2015);slow network is the main reason of technostress, followed by change in the library's software and faulty equipments (Isiakpona & Adebayu,2011) among librarians in Covenant University, Nigeria. Technostress could also be arise when the ICT proficiency level among library professional is relatively low. In some cases, when the library software is not user friendly, the librarian may also find it challenging to navigate from one module to another. Technostress may have also harmful consequences to the institutions which could lead to low performance and burnout among professionals(Porter & Kakabadse,2006).Bloom(1985) states that lack of computer ability and experience are the major reason of computer related technostress. Computer training is often hindered by such fears like breaking the computer, looking foolish and losing control. Doronina (1995)classified various types of computer anxiety: afeeling of ignorance or ineptitude, fear of new technology, fear of breaking the computer in some way and various health threats. An another type of computer anxiety can be considered as "time

panic" ,it is a feeling of not having enough time to complete any task, the feeling that it is difficult to understand and remember everything and finish the task on time. This state of time panic usually manifested when there is a controlled assignment that requires a specific period of time.ICT can create technostress various ways among the library professionals. Firstly, the library professional's capabilities for constant connectivity extend throughout the regular work day. They work constantly odd hours, using different ICT tools and technologies like e-mail and wireless devices. This kind of continual exposure leads to stress and feels that they will be never free from technologies and leads to dissatisfaction of job (Mandel, 2005).Second, the use of mobile communication tools such as laptops and smart phones.It becomes routine for employees to simultaneously handle different formats of information .This will lead to communication and information overload (Fisher and Wesolkowski, 1999).Third,competitive pressure of using the latest hardware and software applications has increased; technical capabilities and terminology related to ICTs have become more complex.New applications takes time to learn and then use in the organizations. Studies shown that individual may experience a kind of phobia, fear and anxiety when required to use computer technologies that they perceive to be complex (Yaverbaum,1988).Fourth, today organizations adopt ICT products and applications that change rapidly. There is a no chance for professionals to develop a base of experience (Kupersmith, 1992).Although library managers are initially excited about learning new applications, but with constant requirement for updating and refreshing can leads to frustration and stress. According to Mahalakshmi and Sonam (2011), one of the main factor that influence the technostress level faced by librarians is the ergonomic factor. Asghar (2012)suggested that the inappropriate infrastructure in the organizations is also one of the causes of technostress among librarians.She further agreed that the fear of virus, feeling that privacy is invaded and delicateness of storage devices is also some other sources of technostress.Ennis(2005) noted the main causes of technostress among librarians lack of proper training, excessive workload, rapid pace of technological change, lack of standardization of hardware and software and changing role of the librarians. The internet is mainly becoming the major cause of technostress due to the fact that

everyday new information is continuously added with no standard in order how they are designed, maintained and updated

Symptoms of Technostress

Technostress has both the apprehension and the pessimistic impact on individual's thoughts, behaviors, attitudes, and body while dealing with technology. The technological increase has certainly brought along many changes in the workplaces today. Although it has allowed us to carry out work faster and more efficient but it also having a harmful physical strain experienced by the librarians such as eye strain, backaches, headaches, stiff shoulder and neck pain (Laspinas, 2015) irritability, headaches, nightmares, insomnia, technological rejection, and technological resistance(Tarafdar, Tu, Ragu-Nathan & Ragu-Nathan,2007) in doing their work.The signs and symptoms of technostress include a variety of physiological, psychological and behavioral changes that are commonly identified in individuals. These changes are revealed in the form of physical and emotional aspects that includes negative self- concept, negative attitude and loss of concern for others. Long term stress may also cause psychosomatic illness (Nawe,1995).One important study was conducted by Charlesworth and Nathan (1984) reported that up to 75% of the visits to physicians are the result of technostress related disorders.It includes hypertension,coronary heart disease, headaches, asthma, gastrointestinal disorders,all are related to stress. Technostress causes serious physical and mental related health issues.Brod (1984) stated the main symptoms of stress are many and varied as many as 194 separate problems have been identified as stress related. These can be both short range and long term and range from indigestion and irritability to hypertension and heart disease. Champion as cited in Coklar and Sahin (2011)suggests that technostress is a serious illness, and includes several symptoms: panic, technophobia, mental fatigue, physical ailments, anxiety and intolerance. It also further leads to work inefficiency and limited utilization of technology. Brillhart (2004)found physical form of technostress such as mental fatigue, headache, intestinal problems, high blood pressure and heart attack; head ache and back ache from overuse of technology Harper (2000); recession in professional efficiency Tu, Wang& Shu (2005); is the main symptom of technostress .Weil, Rosen and Sears (1987) categorized the symptoms of technostress into three main different headings a) Anxious technophobe : exhibits the

signs of an anxiety reaction when using technology like sweaty palm, heart palpitations and headache b) Cognitive technophobe: it means the situation is calm and relaxed externally, but internally seethes with negative messages like how to do this or i will press wrong key etc c)Uncomfortable user: refers a situation when a person may be slightly anxious or use some negative statements .

Coping strategies of Technostress

The coping strategies for technostress have been divided into two major categories: emotion focused strategies and problem focused strategies. According to Monat and Lazarus (1991) as cited in Wang, Shu and Tu (2008),problem focused strategies refers to the improvement efforts towards the troubled environment relationship. For example when an individual is experiencing technostress can seek information about what to do it, look back from aggressive and premature actions and confront the person who is responsible for difficulty. Emotion focused are meant for thoughts or actions with the aim of relieving or reducing the impact of stress. Such strategies cannot change the threatening or damaging conditions, but helps the person to feel better. Examples are avoiding thinking about the trouble and denying that anything is wrong.Adekunle, Omoba and Tella (2007) found that training and knowledge; high level of computer literacy (Sahin and Coklar,2009); regular staff training (Owajeme & Pereware, 2011; Qunin, 2007) of ICT allows professionals to have better understanding regarding the technology and thus reduce the technostress. According to Burke(2008) revealed that the level of technostress tend to be lower when individuals perceived administrative from their organization while dealing with the technology. Ofua and Tiemo (2011) found that technostress can be avoided by the librarians by taking the following measures, regular training of ICT, user friendly software, developing the positive attitude towards ICT. Instruction programmes related to the ICT can also be organized in order to reduce anxiety related fears towards computers (Banks & Havice, 1989).They have recommended the use of different instructional strategies to decrease negative feelings among learners. Computer anxiety is a serious problem during computer instruction for learners with a fear of computers because learners are faced with problem to learn and overcome anxiety, while working practically with the computer that they fear.Owolabi, Aregbesola & Oyesola (2015) revealed the results that regular training,

good office furniture, regular breaks and better implementation of ergonomic practices are the reasons to reduce the level of technostress. Technostress inhibitors refers to mechanism that have the potential to reduce the level of technostress among employees. Examples of such mechanism are staff training, timely technical support and user participation in both the planning and the implementation of any new IT technology. Ragu-Nathan, Tarafdar, Ragu-Nathan and Tu (2008) classified thetechnostress inhibitors into three main categories: a) Technical support refers to support mechanisms in sense of institutionalized support b) ICT literacy facilitation refers to mechanisms that helps to increase the knowledge of ICT among employees with the IT department c) Involvement facilitation refers to strengthen the employee engagement in new technology. Each of the three mechanisms has the ability to reduce the technostress level among employees.

Conclusion

The library professionals working in the libraries experience technological stress when they use ICT related technologies. These professionals or information scientists should devote some attention related to the various issues of technostress and anxiety, and its negative impact on library use. This phenomena has been called as "library anxiety" .Some of the causes/sources that creates technostress among library professionals are lack of adequate staff, in adequate training and lack of hardware facilities, slow network, anxiety of new technology can be considered as the main causes that creates stress among professionals at their workplaces. Besides this, majority of the library professionals experience the symoptoms of technostress like muscle tension, headache, backache, while using computer related operations in the libraries. In order to keep pace with the changing environment, library professionals should themself keep updated with the new format of technologies, acquiring new skills and know how to handle with the latest ICT tools and technologies in the library. The different ways and means in order to reduce or manage technostress, library professionals should be given the proper ICT training and orientation in order to handle the new ICT technologies in their workplaces. Proper sitting arrangement in front of the computers and frequent break at regular intervals can also help to reduce the level of technostress. Furthermore, a close attention should be given to physical health, acquiring technological skills, attending yoga classes and these leads to feelings of confidence and help to manage stress.

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23

Information Seeking Behaviour of PG Students at Tripura Central University, Agartala

Shyamshree Pal
Mukut Sarmah

Introduction

Information is an important resource for individual growth, development and survival. The immense development and progress of modern societies as well as every single individual depends a great deal upon the provision of the right kind of information, in the right form, to the right user and at the right time. In other word, it can be said 'Information' is something which is needed to be able to take a right decision and also reduce uncertainty. Information seeking behaviour refers to those activities, a person engages in identifying his or her own need for information, searching for such information in any way and using or transferring of information. An attempt has been made to study the information seeking behaviour of the post graduate students studying at Tripura University (a central university), Agartala.

Review of literature

The term 'Information' was coined by Thomas D. Wilson in 1981. Information seeking behaviour is the human behaviour with respect to searching various sources, channels including use of that information.Information seeking behaviour is a purposive seeking of information by the user as a consequence of a need to satisfy some goal.Students, research

scholars and teachers actively seek information from various sources available in libraries, for example encyclopaedia, journals and sources available in electronic media. An attempt was made to review the related literature from the earlier studies in connection with the present topic of study to find out the gap. The following are some of them:

Fidzani (1998) conducted a study which aimed to determine about information needs and information seeking behaviour of graduate students at the University of Botswana. The overall aim of the study was to determine what their information requirements are and determine their awareness of library services available to them. Laloo (2002) conducted a study which aimed to determine about information needs, information seeking behaviour and users. Study of information seeking behaviour was mainly upon the user, scientists, social scientists, in business, managers, doctors, university teachers, citizens, about technology transfer, the impact of information on the quality of life, user study and user education.Chelton and Cool (2004) had carried out a study on "Youth information-seeking behaviour theories, models and issues". It was found that measures of children's information-seeking behaviour were adequately increasing.Brutus and Cabrera (2004) examined the influence of personal values on feedback seeking behaviours. This study investigates the relationship between personal values and feedback seeking behaviours. Callinan (2005) had carried out a survey and examined about "information seeking behaviour of undergraduate biology students: a comparative analysis of first year and final year students in University College Dublin". The study highlighted the positive aspects of seeking information from the student's perspective as well as the barriers they encountered when seeking course related information. Lakshmi, Chinnasamy and Venkatachalam (2011) had done their study on the "information seeking behaviour of users in V.M.K.V. Engineering College Library, Salem". This study examined several aspects of library use, including frequency of visiting the library, satisfaction with the opening hours of the library, library collection and user satisfaction from library services. Yusuf (2012) had explored about the information needs, sources and information seeking behaviour of women artisans in Offa metropolis. It had been discussed in the study that information is an important resource for individual growth and survival, the progress of modern societies as well as individuals depends a great deal upon the provision of the right kind of information, in the right form and at the right

time. Dougan (2012) had explored the information seeking behaviour of music students. It sought to explore how and via what tools music students are identifying, locating, and accessing music materials specifically scores and recordings for use in their music studies. Sahu and Singh (2013) had investigated the information seeking behaviour of astronomy/astrophysics scientists. The study concluded that astronomy/astrophysics academics were making use of astrophysics data system followed by their use of e-archives for education and research.Chinnasamy (2016) had conducted a study on information need and information seeking behaviour of engineering college students in Madurai. The paper suggested certain measures for improving information need skills of students to make them more competent information users.It concluded with significance and possible implications of the study.Chen (2017) made a study on information behaviour and decision making in patients during their cancer journey. This study aimed to investigate the effect of cancer patient's information behaviour on their decision-making at the diagnosis and treatment stages of their cancer disease. Ansari (2017) carried out a study on sources and information needs of weavers. The study revealed that illiteracy is the most important barrier for the weavers in obtaining required information and because of illiteracy they are not aware about the available information sources.Choudhary and Kumar (2017) made a study on information seeking behaviour of users of Central Library, Indore. The study made recommendations that could lead to the improvement of student information seeking behaviour and use of information seeking recourse. The results of this study revealed users who are more or less satisfied with library collection and services but they want training in the use of online information.

From the review of literature, it has been clear that although many studies have been carried out on information seeking behaviour in different regions but no study has been conducted in Tripura University and the researchers find it imperative to make the study on the chosen area.

Objectives of the study

The main objectives of the study include:

i) To understand the information seeking behaviour by identifying the users with their frequency of library visit at Tripura University and the type of documents they generally consult in the library.

ii) To identify the satisfaction level with the library collection, resources and services.

iii) To identify the difficulties user come across in accessing information and to know the prospects and challenges of information seeking behaviour.

Methodology

Survey method of research has been adopted for carrying out this study and simple random sampling technique was used to select the sample. Accordingly a structured questionnaire was designed and administered to the PG students of Tripura University and responses of the users were solicited. The questionnaire was framed in such a way that data could be collected to achieve the set objectives. A total of 130 questionnaires were distributed to the PG students and all the questionnaires were taken into account for the study. The collected data were checked, tabulated, analysed to get the findings.

Library system of Tripura University

Tripura Universitywas established on 2nd October, 1987 and it was a state university after consistent demand for expansion of opportunities for higher education and setting of own university by the people of Tripura. The university was converted into Central University on 2ndJuly, 2007.

The Central Library of Tripura University caters the need of information of all the subjects. The library is presently housed in its own three storied building. To meet the pressing demands of the users, the library is striving hard to provide various services both through manual and IT based system with the combined efforts of the library staff members. The Central Library acts as a crucial resources and learning centre of the University to meet the information need of the users for the growth and overall development of the University. The collection and dissemination of data and information and the creation and sharing of knowledge are the success of the central library in the present era of learning. The Central Library has a collection of 1,22,095 books and documents presently besides a rich collection of reports, state-of-arts, non-print media, etc.

Major findings

The data collected through questionnaires were analysed and interpretations had been made. Following major findings have been drawn

out of the study which are presented through tabular and graphical representation.

Responses received from the respondents

As the study was conducted among the PG students of Tripura University a total of 130 questionnaires were randomly distributed, out of which 120 questionnaires were received back from the respondents. The response rate is 92% which shows that majority of the population has responded the questionnaire (Table 1).

Table 1: Responses received from the respondents

Sl. No.	Questionnaire	No.	Percentage (%)
1.	Received	120	92%
2.	Not Received	10	8%
	Total Distributed	**130**	**100%**

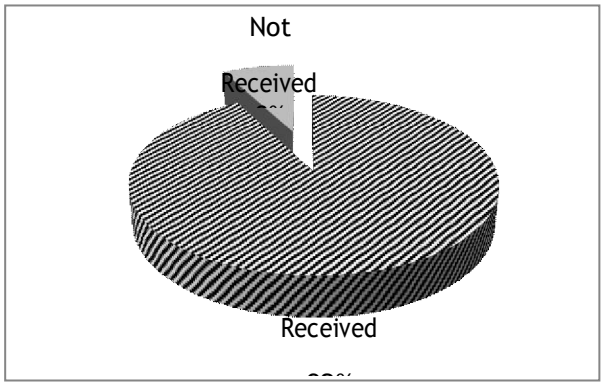

Figure 1: Responses received from the respondents

- ***Library visit pattern of respondents***

  Table 2 below shows the pattern of library visit of respondents. The frequency of the respondents visit to the library are indicated which shows that out of 120 respondents, 83.3% visit the library sometime, 11.7% visit the library often, 2.5% visit the library very often and rest 2.5% have never visited the library (Figure 2).

Table 2: Library visit pattern of respondents

Sl. No.	Visit	Frequency	Percentage (%)
1.	Sometime	100	83.3%
2.	Often	14	11.7%
3.	Very often	3	2.5%
4.	Never	3	2.5%
	Total	**120**	**100**

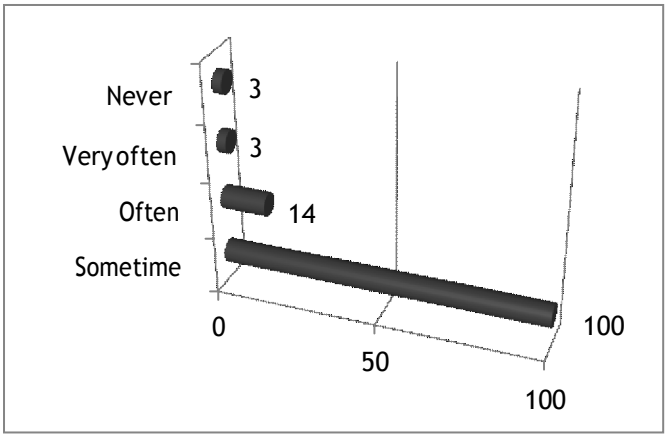

Figure 2: Library visit pattern of respondents

- ***Purpose of seeking information***

Table 3 below shows the purpose of seeking information. The reply given by 120 respondents are mentioned in the table, where, out of 120 respondents, 40% seek information for preparing the exams, 45% for enriching knowledge, 5% for preparing competitive exams, 4.16% seek information to keep themselves up to date and rest 5.83% seek information for other purposes.

Table 3: Purpose of seeking information

Sl. No.	Purpose	Frequency	Percentage
1.	Preparing the exam	48	40%
2.	Enrich Knowledge	54	45%
3.	Preparing for competitive exam	6	5%
4.	To keep up to date	5	4.16%
5.	Others	7	5.83%
	Total	**120**	**100**

Method of searching material in library

Table 4 depicts the methods used for searching materials in library. The respondents were asked *"Which search method do you use for searching material in library?"* The answers given by 120 respondents regarding the method they use are given in the table. After the analysis of data it is found that out of 120 respondents, 5% use keyword search, 15.83% use title search, 35% use author search and 44.16% use subject search (Figure 3).

Table 4: Search method

Sl. No.	Search Method	Frequency	Percentage
1.	Keyword search	6	5%
2.	Title search	19	15.83%
3.	Author search	42	35%
4.	Subject search	53	44.16%
	Total	**120**	**100**

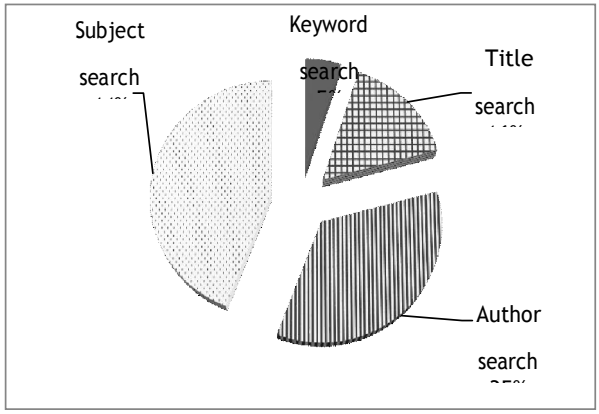

Figure 3: Search method

Awareness about electronic resources

Table 5 shows the tabular presentation of awareness about electronic resources. The question was asked whether the respondent were aware about the electronic resources or not. After the analysis it was found that out of 120 respondents, 49.17% were aware and 50.83% were not aware about the electronic resources.

Table 5: Awareness about electronic resources

Sl. No	Awareness	Frequency	Percentage
1.	Yes	59	49.17%
2.	No	61	50.83%
	Total	**120**	**100**

Type of documents consulted in library

Table 6 shows the type of documents generally preferred or consulted by the respondents in the library. The table represents the type of document generally consulted by the user in the library which shows that out of 120 respondents, 55.83% consult text books, 29.16% consult reference books, 2.5% consult scholarly journal, 3.33% consult newspaper or popular magazines, and 9.16% consult on-line resources.

Table 6: Types of documents consulted

Sl. No.	Types of Document	Frequency	Percentage
1.	Text Books	67	55.83%
2.	Reference Books	35	29.16%
3.	Scholarly Journals	3	2.5%
4.	Newspaper/ Popular Magazines	4	3.33%
5.	On-line Resources	11	9.16%
	Total	**120**	**100**

Availability of reading material

Table 7 below shows the satisfaction level regarding availability of reading materials in library. The table represents the satisfaction level regarding availability of reading materials in library which shows that out of 120 respondents, 35.83% say that reading materials are adequate, 42.5% say that reading materials are partially adequate and 21.6% say that reading materials are not adequate at all.

Table 7: Availability of reading material

Sl. No.	Availability	Frequency	Percentage
1.	Adequate	43	35.83%
2.	Partially Adequate	51	42.5%
3.	Not adequate at all	26	21.6%
	Total	**120**	**100**

Method used for seeking current information

Table 8 below reveals the various methods used by the respondents for seeking current information from library. The respondents were asked "what

method do they use for seeking current information?" The frequency of the method used by the respondent for seeking current information are indicated in the table which shows that out of 120 respondents, 11.66% use current issues of journals, 0.83% use CAS, 10% use personal communication, 8.33% depend on seminar/conference and the majority of the respondents, i.e. 69.16% use internet for the purpose of seeking current information.

Table 8: Methods for seeking current information

Sl. No.	Methods Used	Frequency	Percentage
1.	Current Issues of Journals	14	11.66%
2.	CAS	1	0.83%
3.	Personal Communication	12	10%
4.	Seminar/ Conference	10	8.33%
5.	Internet	83	69.16%
	Total	**120**	**100**

Usage of library catalogue through OPAC

Table 9 presented below shows whether the respondents ever used library catalogue through OPAC. The frequency of the respondents' usage are indicated in the table which shows that out of 120 respondents, 19.16% are not aware about OPAC, 43.33% have sometimes used the library catalogue through OPAC, 5% have often used, 2.5% have used very often and 30% have never used the library catalogue through OPAC.

Table 9: Usage of library catalogue through OPAC

Sl. No.	Usage	Frequency	Percentage
1.	Not aware	23	19.16%
2.	Sometime	52	43.33%
3.	Often	6	5%
4.	Very Often	3	2.5%
5.	Never	36	30%
	Total	**120**	**100**

Level of satisfaction in seeking information

Table 10 below shows the level of satisfaction of seeking information by respondents from the library. The frequency shows the respondents' satisfaction level which is indicated in the table where out of 120 respondents, 48.33% respondents' satisfaction level is good, 10% show the level is very good, 32.5% respondents' satisfaction level is satisfied and 9.16% satisfaction level is poor.

Table 10: Level of satisfaction

Sl. No.	Level of satisfaction	Frequency	Percentage
1.	Good	58	48.33%
2.	Very Good	12	10%
3.	Satisfied	39	32.5%
4.	Poor	11	9.16%
	Total	**120**	**100**

Difficulties in accessing information

Table 11 below shows the difficulties that user come across while accessing information from library. The question asked to the respondents was "what are the difficulties they come across in accessing information?". The frequency shows the difficulties faced by the respondents as indicated in the above table where out of 120 respondents, 41.66% due to lack of time cannot access information. 20% due to lack of access to all information cannot access information, 11.66% due to lack of knowledge of information sources cannot access information, 20.83% due to lack of knowledge in use of library services cannot access information and 5.83% due to any other reason cannot access information from library.

Table 11: Difficulties in accessing information

Sl. No.	Difficulties	Frequency	Percentage
1.	Lack of time	50	41.66%
2.	Lack of access to all information	24	20%
3.	Lack of knowledge of information sources	14	11.66%
4.	Lack of knowledge in use of library services	25	20.83%
5.	Any other	7	5.83%
	Total	**120**	**100**

Suggestions

Some of the suggestions are presented below:

- The Central Library of Tripura University, being the centre of reading materials for the library users, needs to increase the stock of text books as well as reference books of different subjects and of various authors.

- The students should be made aware of the different services available in the library and additional services should be introduced to increase the use of library.
- The library staff should provide regular orientation programme to the newly admitted students in order to overcome the difficulties faced by the students coming to the library.
- Many reputed journals are available online through open access, networks and consortia. Users should be made aware of these e-journals and proper guidance should be given for their extensive use.
- The library timing is not convenient for students as they have to attend the classes so the library timing should be extended.
- Library should make arrangements to attract users to visit the library and to create reading interest within them for enhancing their services and to satisfy the users' information needs.
- Users should be trained on using the library OPAC and to access other online information resources.

Conclusion

Tripura University is only the central university in the Tripura state with its largest collection, the library has been striving hard to meet the user's information requirements. The actual needs for the information by the users should be understood by the library and necessary steps to satisfy them should be taken. Through the study it was found that the satisfaction level regarding availability of reading materials in library is 42.5% and the reading materials are partially adequate. The collection needs to be updated with new edition which will help the users in fulfilling their demands. The Tripura University Library should pay more attention to meet the pressing demands of the users by rendering various services both through manual and IT based system through combined efforts of all the staff members. They need to progress steadily towards fuller automation of the library to improve their resources and services and it is believed that it will soon be an important centre of learning.

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Smart Cities, Smart Libraries and Smart Knowledge Managers: Ushering in the neo-Knowledge Society

Mayukh Bagchi

Introduction:

Cities have remained the epicentre of human life and action since the dawn of human civilization. With passing time and improving social intellect, they have been driven through and viewed from a variety of perspectives. One such prominent view-point remains the infallible conceptual hierarchy of Data-Information-Knowledge-Wisdom (DIKW) (Ackoff 1989). The earliest societies were the very first transactors of data in their most rudimentary form- facts, figures or instructions. Such trend continued for a long time until the early and late medieval societies realised the importance of contexts and relationships amongst the data, with the focus shifting to contextualized and meaningful data- Information. As societies gradually modernized, aided by industrial and technological innovation (especially, computing prowess), information as the sole basis of communication and transaction, turned out to be functionally inefficient. Knowledge, i.e. experience, context, intuition and insight applied to information, became the dominating driver of the society. Corporations and public institutions invested heavily in researching and developing the various possible tools and technologies aimed at mining out knowledge from data and information, leading to the emergence of new realms of study like Knowledge Discovery and Data Mining. Thus, the natural progress of societies complemented and correlated with the progression envisioned in the DIKW conceptual hierarchy.

That's not the end, though. The arrival of the 21st century ushered in multi-dimensional changes to the fabric of societies. Data, Information and Knowledge became equally important tenets around which societies revolved, and, the concept of Smart Cities came into existence. Data once more became the talk of societies due to its unbridled generation and capture, facilitated by new technological concepts like Big Data, Internet-of-Things (IoT) and the highly user-participative social media boom. A brand new discipline of Data Science came up to support its research and development. The demand for information and knowledge became even more stronger, considering their emerged economic importance as resource and commodities. Libraries and librarians, traditionally limited by their role as preservers and disseminators of society's recorded knowledge, donned the hats of Knowledge Resource Centres, Data Librarians, Information Scientists and Knowledge Managers, dabbling in the life-cycle management of unimaginably diverse forms of information and knowledge. Even the concept of wisdom, which is understood as collaboratively applied knowledge enriched by experience, foresight and heuristics, has been latently leveraged in the form of predictive analytics. The mix and match of Information and Communication Technology (ICT), sustainability, innovation economy, good governance and Quality-of-Life (QoL) metrics contributed towards a newer variant of knowledge-based society, a neo-knowledge society. In a nutshell, social life became way more smarter and technologically rich. The paper attempts to present a cohesive yet multi-faceted view of how smart libraries and smart knowledge managers can foster smart cities into ushering in the neo-knowledge society.

Review of literature:

There have been a considerable number of works of broad conceptual importance, dwelling upon various dimensions of smart cities, smart libraries, knowledge managers and knowledge societies, individually. Though, very few have attempted to properly delineate how the interactions (both intra and inter) amongst these dimensions and concepts, ultimately lead to the emergence of the neo-knowledge society.

Eremia, Toma and Sanduleac (2017) discuss the emergence and the best-fitting characteristics of smart cities through an evolutionary analysis. The US-India Business Council (USIBC), in a white paper, define several unique markers characteristic of a smart city, and, goes on to discuss the important role of ICT and smart intellectual infrastructure in envisaging

them, with a special reference to India. An all-encompassing reference framework for conceptualizing smart cities in India has been proposed in the landmark report "Reconceptualising Smart Cities: A Reference Framework for India" (Bhattacharya *et al*. 2015). An overview of the various challenges and associated assessment metrics for smart cities have been illustrated in Monzon (2015). Novotný, Kuchta and Kadlec (2014) address aspects related to technological solution, support and applications required for smart cities. Societal, technological and market requirements to analyse, assess and formulate new standards for smart cities have also been documented (ISO/IEC JTC 1, 2015). TU Wien, University of Ljubljana and TU Delft (2007) in the report of one of their leading research projects, ranked several smart cities geographically distributed across Europe, based on selected parameters. Leicestershire County Council, in one of their library and information service reports, discuss the nature, characteristic features and working of an ideal smart library. Schöpfel (2018) attempt at a mapping of the essential dimensions of smart cities and smart libraries, enriched through an integration of aspects from people, processes and technologies. Indergaard (2012) elucidate several ideas and strategies for a smooth transition to a new library concept suited for smart cities. Breeding (2017) emphasize the role of technologies in achieving smart libraries, alongside the need to develop efficient technical mechanisms for library data privacy in the smart era. Yang *et al*. (2017) identifies the various possible applications of Deep Learning in smart libraries. Baryshev (2015) elaborate, in a detailed manner, the developmental journey from electronic libraries to smart libraries. Evers (2002) chart out the natural growth of a knowledge society and the ensuing knowledge gap, from a combination of economic and epistemological perspectives. The Department of Social and Economic Affairs of the United Nations (2005), in a landmark monograph, explain the changing developments effecting the conceptual length and breadth of knowledge, and, how they will accentuate the development of futuristic knowledge societies. The concept of knowledge societies have also been attributed to the emergence of the concept of knowledge-based economies, their challenges, best practices and success models (Garner 2016). Wessels *et al*. *(*2017) explore the interrelationships between open data and big data within a generic data ecosystem, facilitating the emergence of knowledge societies. Hornidge (2011) attempts a rich historical and conceptual review of knowledge societies from an academic perspective.

Smart Cities, Smart Libraries & Smart Knowledge Managers: The Symbiosis:

Smart Cities:

The concept of smart cities, since its popular inception in 1990s, has been characterized and interpreted differently by different stakeholders. Batty *et al.* (2012) define a smart city as one which is characterized by the embedding of ICT within conventional city infrastructures, focussing on the integration and potentiality of applicable digital technologies. The American Planning Association (APA), in several of its regional conferences, have also visualized smart cities as an interactive dual of cities- with its citizens, services and sub-systems, aided by an integrated ICT infrastructure as its backbone. The much discussed IBM Smart Cities documentation speaks of a smart city as a knowledge-optimized liveable infrastructure, with efficient analytics-support and information management-based governance to drive the city's subsystems. NASSCOM ("National Association of Software and Service Companies"), India, have also gone to the extent of developing an integrated ICT and geospatial technology framework, specially designed for the Indian smart cities programme. Technological utilities .which are poised to be major players in a smart city environment include (not exhaustive) Artificial Intelligence (AI), Big Data Analytics, Blockchains, Internet-of-Things (IoT), Cloud Computing, Knowledge Management (KM) tools and techniques, Semantic Web technologies, Agent technologies, Robotics, Networking technologies, Ubiquitous Computing, Geo-Spatial Information Systems and Human Computer Interaction (HCI).

Besides the stress on ICT and upcoming digital technologies as the core building-blocks, explanations characterizing smart cities have also included many other aspects, some of which are social infrastructure, environmental sustainability, smart policy making, energy efficiency, mobility and equity optimization, and, smart economy.

Smart Libraries:

Smart libraries are libraries envisioned for smart cities. They can be aptly defined using a re-formulation of Prof. S.R. Ranganathan's library triad- smart information, smart users and smart staff. As an overall concept, smart libraries are considered as public information institutions piloting the accession, dissemination and curation of data, information and knowledge

(mostly in electronic form) for users who are technology friendly, facilitated by a combination of advanced ICT tools and technologically sound library staff, acting as a centre of thrust and support for the sustainability of smart cities. Some of the distinctive as well as evaluative hallmarks of smart libraries, which are in stark contrast to the reality of majority of today's libraries are enumerated as follows:

* All-encompassing and pervasive use of ICT, resulting in intelligent and automated library housekeeping operations

* As the central hub of a city's technology and innovation management, providing unprecedented level of open access to information through open science cloud(s) & smart digital repositories

* As the backbone of a smart city's Intellectual Infrastructure, piloting of increasingly important user-centric smart practices such as Information & Knowledge management- including services like Digital Curation, Research Data Management (RDM) etc.

* As a smart city's go-to centre for learning, skill, curriculum and research development, facilitated by in-house developed & externally aggregated formal, information and virtual open educational packages in the form of Massive Open

Online Courses (MOOCs), Open Educational Resources (OERs), educative mashups and Information, Media and Data literacy programmes

* Community engagement practices through smart community information services, leveraging technologies like semantic web, linked open data and HCI

* Architecturally and indoor décor-wise sustainable, truly implementing the essence envisioned in conceptualizations like makerspaces

· Smart knowledge managers from the library and information science community with expertise in applying advanced technologies, spirited by the motto of providing smart information services as a part of good, inclusive & sustainable governance.

Smart Knowledge Managers:

Smart libraries would require smart knowledge managers- librarians well versed with emerging techno-managerial skill sets and innovative learning pedagogies, over and above their traditional core competencies. In manning libraries driven by ICTs, the profile of smart knowledge managers would include tasks like formulation & implementation of

knowledge-based programmes, anticipative & adaptive innovation-driven knowledge strategies, and, self-learning & problem-solving worthy knowledge communication. There have been several analyses regarding the competency-spectrum of smart knowledge managers. One such study (Al-Hawamdeh and Foo 2001) develops two relevant skill-set formulations. The linear formulation enumerates skills like creativity, ICT, diverse subject backgrounds, analysis and communication to be of utmost essentiality for smart knowledge professionals. The second approach, which is more taxonomic in nature, divides the professional competencies into six broad divisions- information skills, communication skills, analytical skills, IT skills, leadership-management abilities and personal characteristics- which are further sub-divided to form a more granular view-point. Further, in mapping with the characteristic hallmarks of smart libraries, smart knowledge managers are also expected to be proficient in data and information governance, knowledge management, web technologies (including semantic web), artificial intelligence, data analytics, e-governance & e-learning technologies, digital curation, digital rights management, open science, makerspaces, and, information & media literacy. It is also noteworthy that the essence of the emergence of smart cities also calls for decentralization within libraries, with commissioning of specialized posts like Data Librarian, Metadata Librarian, Information Literacy Librarian, Technology Librarian, Librarian for specially abled individuals- each devoted to an area of expertise within a library, as opposed to the mostly linear organizational structure in majority of today's libraries.

The Symbiosis:

With the continual rise in excitement regarding smart cities across various quarters, it is but natural that discussions about smart libraries and their custodians are also happening, albeit mostly within the library and information science community. The transformation of cities into smart cities will also bring about metamorphoses in today's libraries, basing them on a strong technological foundation, becoming more user-centric and fulfilling a city's information needs as its unshakeable intellectual pillar. Smart Libraries and smart knowledge managers also, as vital components of a smart city, should support the smooth running of its multi-dimensional services facilitating sustainability, inclusiveness and good governance for all its citizens.

The neo-Knowledge Society:

A knowledge society, as popularly understood, refers to a society which thrives by leveraging knowledge through an intricate succession and implementation of knowledge management activities like knowledge creation, knowledge capture, knowledge codification and retention, knowledge sharing and knowledge use. It is also often re-interpreted as a society which deals with knowledge, both as resource and as commodity, having different societal ramifications with respect to technology, business, politics, economics, culture and education, with an ultimate aim of accentuating human progress. Such a society is different from an information society, in the sense that the latter posits creation, integration, transformation, management, distribution, use and curation of information (i.e. meaningful and organized data) as its prime driver, whereas the former deals in uncovering & putting-to-use contextualized and experience-laced information, i.e. knowledge, one level up in the abstraction hierarchy (DIKW). Data Mining- finding out patterns indicative of knowledge in huge corpora of information- remains the pre-eminent technology in knowledge societies.

The neo-knowledge societies, which smart cities are expected to usher in, retains the characteristics of the present conceptualization around knowledge societies, and, ventures further in terms of its few extra transformational characteristics. One of its envisioned characteristic feature lays out the equal importance of data, information and knowledge in the conduct and management of various activities in different walks of societies. A smart city environment would invariably be witness to an unprecedented gamut of data generation, capture, analysis and curation due to enhanced understanding, access and implementation of advanced technological arenas like Data Science, Big Data Analytics and IoT. Advances in computing-based information and knowledge processing would similarly induce a paradigm shift in governing the complex network of information flow expected in a smart city. In addition to these features, another hallmark of the neo-knowledge society would also be the potential social involvement of the concept of wisdom, in diverse forms like predictive analytics, predictive modelling and business intelligence; to extract insights from knowledge and providing decision support services for the smart cities to remain competitive as well as relevant. It is needless to mention that to make all these happen, smart libraries and smart knowledge managers

have a pivotal role to play in terms of supporting informed decision-making and soft-power development for neo-knowledge societies.

Opportunities vis-à-vis Library and Information Science (LIS) as a domain:

The ushering in of a true neo-knowledge society in the form of smart cities, supported by smart libraries would also signal an opening to a plethora of professional and research opportunities for Library and Information Science as a domain. Some of the relevant aspects are categorized and discussed in the following points:

LIS Schools & Curricula:

First of all, to achieve smartness for libraries in technological terms, LIS schools and their curricula should undergo major revamp. Old fashioned syllabi and teaching methodologies should undergo continuous revision, and, make way for topics (essentially, smart library technologies mentioned in the previous sections) and learning pedagogies with a technological base, in sync with the needs of smart libraries. This does not necessarily translate into shelving off all traditional arenas of study in LIS, rather, it implies technological conditioning of selected topics in order to make them relevant and applicable, alongside new introductions. Topics which are trending yet difficult to accommodate within the formal teaching curricula can be taken up and discussed in academic seminars and colloquiums. There is also an emergent need for LIS schools to re-brand and market themselves for increased visibility, exposure and funding (case in point, i-schools). Further, intra-disciplinary and inter-disciplinary conclaves and conferences should be organized by these schools from time-to-time, with an aim to motivate its students to become future smart knowledge managers.

LIS Research:

Similar to goals envisioned for LIS schools & curricula, research conducted in Library and Information Science should also orient itself towards tackling libraries of the future, intelligently balancing the delicate line between concept build-up and practically implementable models. Researchers should immerse themselves into how upcoming technologies, frameworks, standards and concepts can be leveraged by libraries, making them technologically rich enough to be able to match the growing standards of smart cities, and, pitch for relevant projects showcasing their competencies. There should also be serious research into how traditional

LIS concepts can be mapped and made relevant with emerging technologies. Further, it will be a best case scenario for all stakeholders if research and curriculum-based education go hand-in-hand in an LIS school.

LIS Job Opportunities:

It is beyond doubt that smart cities will bring with it unbridled employment opportunities in multiple sectors for professionals skilled in Library and Information Science. Besides their obvious chances in smart libraries & academia, graduates and researchers schooled in updated curricula and research trends are also expected to join IT consultancies, policy think tanks, scientific institutions, knowledge management divisions of corporate bodies, and, even launch their own start-ups, providing consultancy services to libraries and allied institutions.

Conclusion and Future Work:

Before concluding, it would be relevant to note that the transformation of today's cities towards their smart future is inevitable, and, that the role of smart libraries and smart knowledge managers will be paramount in that set-up. Hence, active future research is needed in the form of implementable frameworks as to how the emerging technologies can be integrated and leveraged to deliver smart solutions in every facet of library services.

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Guwahati Blind High School Library: A Gateway of Knowledge for the Visually Impaired People

Sangeeta Roy
Rosy Chakraborty

Introduction

Guwahati Blind High School was established in the year 1976. The school has a campus of 20 *bighas*.It is vernacular co-educational school, have classes from I to X and is affiliated to SEBA. The school has a total number of 14(fourteen) teachersand 9(nine) office staffs. The school also has visually impaired teachers who are well trained in their respective fields. Presently, it has a total number of 60(sixty) students, comprising both boys and girls and it is a completely residential school. There are separate hostels for both the boys and girls, with a common dining hall. The hostel has a total capacity of 75 beds. The hostel is managed and looked after by the State Social Welfare Department. The state government provides free education to these especially abled children.

Spoken English classes are taken. Computer, craft and music classes are also taken on regular basis. As it is completely a government run school, but the school also runs on the donations given by the people. Bhaben Barman is the present Principal of the school.

Visually Impaired People

These are especially abled people whose sense of vision is hampered either by birth or due to some sort of accident or medical ailment. Visually impaired people often stop their education due to the difficulty faced by them through the period. They have special needs and therefore, cannot

compete with the normal people with vision due to physical barriers. As such, they also need special library in which they can find needed information with much ease. Therefore, for them Braille Libraries were opened. These libraries consist of books in Braille and other materials like talking books and newspapers, online audio libraries etc.

Braille Library

Braille library is a special type of library meant for visually disabled persons. These are the libraries with Braille books and other equipments or facilities, which help to meet the needs of the visually impaired users. Visually impaired people have to face many challenges of the society, to make themselves morally abled so that they can equally get whatever a normal person have. They have to overcome different barriers and it's not easy for them to meet these challenges. Similarly, they have to face numerous difficulties in a general library to meet their needs or get right information without much hassle or problem. Therefore, Braille Libraries are special libraries designed for these people to get the right information within their reach and with ease.

Objectives

The main objectives of the study are:

* To make a study about the organisation and management process of the library which is one of its own kind.
* To know about the functioning and present condition of the library.
* To know about the user's needs in these type of libraries.

Methodology

The paper is a research based article, which has been written completely by personally visiting the blind school. Data have been collected through direct interaction with the Librarian of the school. The principal, office staffs and teachers of the school have cooperated fully in collecting the overall data of the school.

Observation and Discussion

The first Braille library has been set up on January 5th,2017 in the premises of Guwahati Blind High School and Assam got its first Braille Library for the needs of the especially abled children of the school.

It was started with a mere collection of 200 documents,which included textbooks, fictions, magazines etc. At present, the collection has reached up to 3000 approx., which includes textbooks, storybooks (class wise), biography etc.The school purchases books of class IX and X.

There is a separate buildinglibrary with enough reading space for its users. There is a seating capacity of 6(six) students in the library. The students can use the library according to their time and needs within the school hours 9:00 A.M to 4:00 P.M. The books have been well stackedclass wise in 5(five) steel almirahs, which are spacious enough. The books have been arranged according to the standards (class I to X). Other books have been kept separately. There is no grammar book in Braille. A simple register is maintained for the acquisition of the books. No issuing registers are maintained. Fines are not issued to the defaulters. The books are lent for one week only. There are very few numbers of story books. The library has only two magazines i.e. Footprint and Contraction. There is only one newspaper in the library i.eNiyomiyaBarta. The news headlines are read out when asked by the students.

The library is maintained by a visually handicapped librarian named Miss PurabiTalukdar and she has been working from 2017. She is an Arts graduate and have no basic Library and Information Science degree. In spite of all these, she is maintaining the library well often with the assistance of Grade IV staffs of the school. According to her, she is satisfied with her job and providing services to the users. The students enjoys a lot by using the library.

Fig.1: Library Building

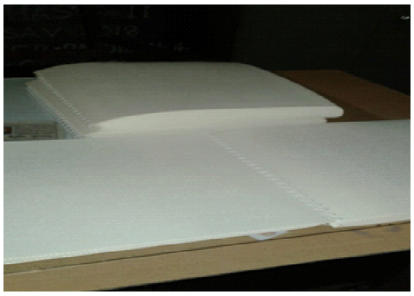

Fig.2: Braille Books

Fig.3: Library Room

Fig.4: Library (Braille) Books

Conclusion and Suggestions

After surveying, observing and analysing the Braille Library, we have come to the conclusion that the library has been well managed by the present librarian and catering to the knowledge needs of the school fraternity very well. IFLA have provided certain guidelines for development of the Braille libraries. The Guwahati Blind High School Library is not according to the library standards and needs to be improved to provide better services toits users.Following are some suggestions which are given as:

1. Proper funding should be provided by the govt. to make its services better.
2. Reference books must be provided.
3. More magazines and newspapers should be there.
4.Proper accession registers should be maintained.
5. The librarian should have at least a diploma in Library and Information Science.
6. Introducing a compulsory period for students so that the library materials should be used to its maximum.
7. The library must include sound recordings(talking books) in their collection.
8. There must be facilities of Braille and Audio Reading Download (BARD) service in the library and which should be introduced very soon.
9. Online braille library (service by National Institute for Visually Handicapped Dehradun) should be made available for the students.
10. Facilities of braille newspapers like Reliance drishti must be made available in the library.

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26

Libraries are gateway to knowledge society

Maya Moyee Narzary

Introduction

Libraries do exist since ancient times. During that time though the collection and services of the libraries are for the previlaged categories/ subject, but the very siprit of the library is to educate, enlighten, recreation and pleasure reading. Carl T. Rowan says that, "the library is the temple of learning and learning has liberated more people than all the wars in history'. Indeed, the glory of education/learning encompassing various parameters is unmatchable. Education brings peace, harmony, integrety, prosperty and healthy democracy. Whereas wars, leads to destruction in all aspects and puts a stigma & trauma to the nations concern and the mankind in general. In the present milieu, libraries of all kinds, no matter to which it is attached to, seems to be the selfless source engulfing various resources for information, education, recreation, study, and research. Since, it is apt to pronounce that it is the gateway to information society heading towards the knowledge society.

Data, information, knowledge, wisdom

Before intruding to the concept of knowledge society, focus can be made on the chain of relationship and transition of data into information, knowledge and ultimately to wisdom. Data may be a raw fact, figures, or symbols which is unrefined or unprocessed. By its very nature it can not be used in solitary. Information on the other hand is the processed or organised data which can be useful or in a useable form for various purposes. Likewise, knowledge implies the application of information with one's own

perception and study for some specific resaons or cause. And when use of information mingles with the experiences and become instrumental in sound judgement ultimately leads to wisdom. Thus, these are the constituents of the human mind which gets mechanised. Libraries may be one of the reliable sources of information, where data collected from different media or sources can be systematically arranged or processed which may be the useful information for the anticipated users.

Globalization and need of lifelong learning

Shastri (2009) predicts that "Globalization is a steadily evolving and expanding concept. Narrow nationalism is dangerous; but galloping globalisation is a glowing ball of fire which may totally efface national cultures and idealities. National interests and global concerns need to be balanced. We should not be swayed away by emotional slogans." This new phenomenon of change is inevitable. The process of globalization has swapped over the whole nations of the world through different policies of the nations and trends in all dimensions i.e economic, cultural and social. It has many pros and cons, but the fact is that one needs to adapt to the change bestowed by it.

Globalization has brought sea change all spheres of life. Rapid growth and development in different technologies particularly in the domain of ICT has necesiated the users of information to be the lifelong learner to approach and access varied resouces of information. Panda (2009, p.38) highlights the needs of lifelong learning as it aims to:

* Constitute a continuous process of formimg whole human beings-their knowledge and aptitudes, as well as the critical faculty and ability to act,

* Enable people to develop awareness of themselves and their environment and encourage them to play their social role at work and in the community.

Lifelong learning can be attained formally or through self exploration. And it is also considered as one of the constituent of the knowledge society. In this instance, libraries can be the one of the source of lifelong learning. Libraries facilitate and encourage reading & study. Academic libraries always compliment and suppliments the classroom instructional programes or curricula, farther it also promotes additional readings. Public libraries in

general provide almost free services with minimum membership fees for the lifetime to the general public whosoever wants to use the library. National libraries and special libraries are generally not entrusted for the general use. An ardent and habitual reader definitely attains the persistency and instrumental in becoming a lifelong learner. Excessive use of information and knowledge as the staple food for every sphere of life whether for academic, social, economical development and personal development certainly will leads towards the knowledge society in broader terms. And libraries can be treated as the reliable gateway to these information and knowledge.

Knowledge society

Raghavan and Neelameghan explain that "it is doubtful if it is meaningful to try and differentiate between the meanings of 'knowledge society' and 'information society'. The conceptual distinction between the two is only relative and is indeed very difficult to sustain as these terms are often used as synonyms."

Holmner defines information and knowledge society as "a society that is reliant upon a sophisticated physical and ICT infrastructure for the improvement of everyday living and working conditions. A society that values the importance of information as a key to economic wealth and prosperity and where there is an increase in information related activities, as well as an enhancement of human intellectual capability. The information and knowledge society ensures the freedom of information through the use of information and communication technologies."

In this age of globalization, knowledge is considered as the most valuable and marketable commodity**.** Knowledge is power which makes disparities amomg the nations or country as knowlegde rich nation thriving in all sphere of the country. It is not denying the fact that the only information user can be the active contributor of new knowledge to the universe of knowledge. Further, knowledge society endorses new type of literacy i.e information literacy. In pursuance to that, ALA's final report (ALA, 1989, p.9) states that:

"To respond effectively to an ever-changing environment, people need more than just a knowledge base, they also need techniques for exploring it, connecting to other knowledge bases and making practical use

of it. In other words the landscape upon which we used to stand has been transformed, and we are being forced to establish a new foundation called information literacy. Now knowledge –not minerals, or agricultural products or manufactured goods-is this country's most precious commodity and people who are information literate-who know how to acquire knowledge and use it- are America's most valuable resources." America being the developed country and super power, felt the need of information way back in late 80's itself. And consequently gave priorities to the growth and development of the libraries.

The ushering of knowledge society is well indicated by the fact that in this era knowledge is created, stored, shared and used by the people as the most preferred commodity as compared to the natural resources in all walks of life. In other words, it has economical values than any other commodity.

Changing library environment

During late 18th century, the concept of public libraries has been introduced by the British Company by establishing public libraries in metropolitan cities. Earlier, libraries are patronized by the native rulers. The very testinomy can be trace back to the existence of Nalanda University in fourth century (fifth century) build by Asoka (Maurayan Emperor) and later patronized by Gupta Emeror, where libraries are supposed to be very rich. Later on, Taxila, Vikramasila, and many others were also established as the centre of learning. According to Kumar (2010, p.7) the growth and devlopment of libraries depends on:

* Political and social stability of the society,
* High standard of living
* High rate of literacy
* Local and national traditions
* Encouragement from the local, state and national governments
* Influence of leading individuals
* Well established book trade
* Existence of large chunks of urban population.

Earlier its services, collection and users are very limited. Libraries got drastic changes in all its activities. Due to information explosion, users usually find difficulties in getting the pinpointed information for their use

from the heap of information. Traditional library services are no more efffective to some extend, as the ICT has taken over the platform so far effective library management and services is concern. Many emerging technologies –Internet, www (World Wide Web), mobile technology, etc are now evident in modern libraries.

Thus, due to the advent of ICT it is no more a hurdle for the libraries to cater needs of the users surpassing the boudaries of the libraries exhaustively and expediously. Libraries are now in a threshold/capable of providing flexible learning environment pertaining to its collection, and wide range of services to its valued users with real time experience and economy.

In libraries, use of ICT refers to the use of various technologies such as word processing, communication technologies, computer technologies, video recording, barcode technology, reprographics, web 2.0 technologies and other electronic devices for the smooth functioning, and fast storage, retrieval, reproduction and dissemination of information. Thus, use of ICT has enabled the libraries to:

* Provide free flow of information
* Create different databases (student database, stock database, institutional repositories, indexing, abstracting, etc.).
* Repackaging of information.
* Activated automation & digitization of the libraries.
* Alerting services (CAS, SDI, E-mail, etc)
* Online information services
* Creation of virtual libraries i.e libraries without wall.
* Effective cooperation and coordination with other libraries.
* Resource sharing and creation of library and information networks.

Libraries got transformation in all aspects. Regardless of its type, libraries are adopting the advantages of technology which is the need of the hour for better library management, advance services and user satisfactions. Mention may be made that, many studies have reflected that besides other problems in modernizing libraries almost most of the libraries faces the problem of financial inadequacy, lack of sufficient professional/ skilled staffs, lack of required support from the parent organization and from the government so far the definite plan/policies or guidelines for the libraries are concern.

Amidst these problems, libraries are thriving and changes in libraries have changed the role and image of the librarians. Now, the librarians are no more merely a custodian of the library but necessiated to acquire many skills/knowledge other than the professional skills viz. technological knowledge, managerial skills, soft kills, etc to adapt the new role as- teacher, leader, advocate, and information manager,

Libraries as gateways

Irrespective of its kind (National libraries, Academic Libraries, Public Libraries, Special Libraries) the sole functions of the libraries which varies with the type of library are (Kumar, 2010, p.4):

* Life-long self education,

* Information/documents on all subjects including local, national and international affairs to serve economic, political and social welfare,

* Proper use of leisure

* Advancement of culture,

* Preservation of literary heritage for posterity.

Libraries are epithet as treasure house of knowledge, temple of learning, heart of the academic institutions, peoples' university, frontier of knowledge and many more assessing the need and importance of the library. Library becomes popular amomg the users for its collection, facilities and services. And to facilitate the services, American Library Association (ALA) insists on some policies (Ramamurthy, 2005, p.98-99):

i) Books and other library resources should be provided for the interest, information and enlightenment of all people of the community the library serves. Materials should not be excluded beacause of the origin, background or views of those contributing to their creation.

ii) Libraries should provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed beacause of partisan or doctrinal disapproval.

iii) Libraries should challenge censorship in the fulfilment of their resposibility to provide information and enlightenment.

iv) Libraries should cooperate with all persons and groups concerned with resisting abridgement of free expression and free access to ideas.

v) A person's right to use a library should not be denied or abridged because of origin, age, background or views.

vi) Libraries that make exhibit spaces and meeting rooms available to the public they serve should make such facilities available on an equitable basis, regardless of the beliefs or affiliations of individuals or groups requesting their use.

Moreover, libraries provide support to the readers by:

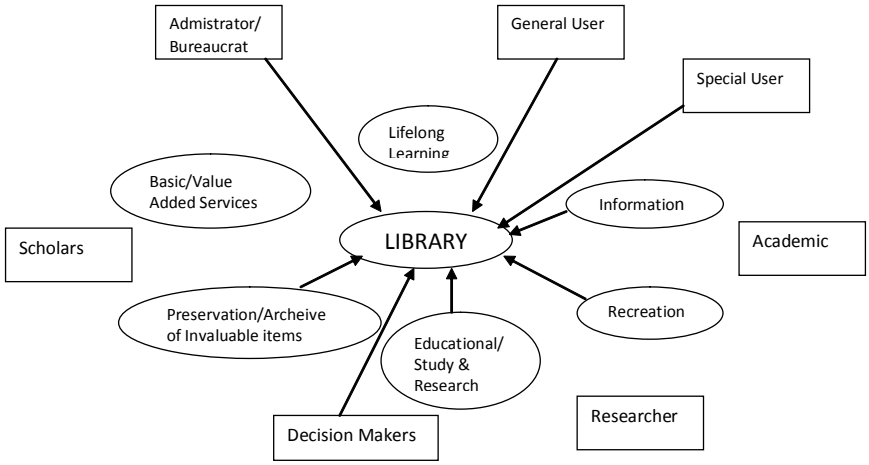
* Act as the hub of information.
* Procuring books/ printed or non printed materials for the readers.
* Providing facilities to the readers for study.
* Making open access and flexible reading hours.
* Provides awareness/orientation to the users regarding the use of new sevices and resources of the library.
* Assists users in accessing information from varied sources and online services.
* Conducts information literacy programmes/training for the users which leads them to be the lifelong learners.
* Provides e-learning services to the users.
* Provides information/education about e-resources access rights and copyrights.
* To provide every possible access to the resources, pariticipates in consortia and other similar library networks.

Libraries have now become the agent of change by providing required informational needs of the users by handling information and re-egineering the library services and products. Thus, libraries can be considered as one of the most reliable gateway to information for all cause. It equips the reader to be the confident user of information. National libraries are not meant for the general use but it has the responsibility of collecting and preserving literature of national importance pertaining to concern nation within and outside. Whereas, academic libraries and public libraries services are information and user oriented. Sophiticated and innovative services of the libraries can really enhance the social, educational, cultural and economic development of the society – a society where information is considered indispensable in all walks of life which is heading towards knowledge society.

In emerging India, libraries in the schools are unfortunately not much realised and it is mostly managed by the unqualifed staff. It is evident that with some exceptions, colleges and universities have good library services as UGC are providing generous grants to develop libraries in these

institutions which is indispensable for the higher studies. Moreover, NAAC's has also taken positive initiative to include library as the vital sub-unit of the academic institution for the overall assessment.

Generally, libraries are user oriented. Therefore it is approached/ visited by different user for varied purposes:



Users and Use of the Library

The above block diagram depicts the variety of users as well as the commitment or the usability of the library. For the ardent users, library seems to be the panacea for all quests pertaining to information and knowledge. Certainly, libraries are gateway to knowledge society, a society where knowledge is ultimate. Libraries can provide one stop solution to all the information users provided it should be handled and managed by the skilled professionals and must have the endorsement from the concern institutions as well as the government through some proper guidelines and policies for the overall development of the libraries in general.

Digital library initiavtives

Assessing the importance of library as one of the sources of upbringing the society, and the media to bride the knowledge gap; certain inititatives have been taken by the government to reach the outreach through digital libraries as the positive steps. . Moreover, India happens to be the de-facto signatory of UNESCO Universal Declaration on Cultureal Diversity

(2001) to preserve culture and heritage of India and made it accessible to the people. Some initiatives are (Barui, https://www.researchgate.net):

Sl. No.	Initiatives	Activities	Website
1.	Digital Library of Books	1. Digital Library of India	http://www.dli.ernet.in/
		2.VigyanPrasar Digital Library	http://www.vigyanprasar.gov.in/digilib
		3.NCERT Online Text Books	http://www.ncert.nic.in/textbooks/testing/Index.htm
2.	Digital Library of Manuscripts	1.Kalasampada: Digital Library Resources for Indian Cultural Heritage	http://www.ignca.nic.in/dlrich.html
		2.National Databank on Indian Art and Culture(NDBIAC)	http://ignca.nic.in/ndb_0001.htm
		3.National Mission for Manuscripts	http://www.namami.org/index.htm
		4.Muktabodha: Digital Library and Archiving	http://www.muktabodhalib.org/digital_library.htm
3.	National Digital Library of Electronic Thesis & Dissertation	1.Shodhganga: Indian ETD Repository	http://shodhganga.inflibnet.ac.in
		2.Vidyanidhi Digital Library	http://www.vidyanidhi.org.in/
		3.Digital Library of Institutional Repositories	----------
4.	Digital Library of Journals	1.Indian Academy of Sciences	www.ias.ac.in/pubs/journals/
		2.Indian National Science Academy	www.insa.ac.in
		3.NISCAIR Research Journals	http://nopr.niscair.res.in/
		4.Indian Medlars Centre	http://indmed.nic.in, http://openmed.nic.in
		5.Indian Journal.Com	www.indianjournals.com
		6.Medknow Publications Pvt.Ltd.	www.medknow.com/journals.asp
		7.Kamla-Raj Enterprises	www.krepublishers.com/KRE-New-J/index.html
5.	Digital Library of Online Courseware	1.NPTEL (National Programme on Technology Enhanced Learning)	www.nptel.iitm.ac.in, http://youtube.com/nptelhrd/
		2.E-Gyankosh	www.egyankosh.ac.in
		3.Learning Object Repository CEC (Consortium for Educational Communication)	www.cec-lor.edu.in
		4.E-PGPathshala	http://epgp.inflibnet.ac.in/about.php
		5.Indo-German E-Gurukul on Digital Libraries	http://drtc.isibang.ac.in/mmb/
6.	Library Consortium in India	1.UGC-INFONET Digital Library Consortium	http://www.inflibnt.ac.in/econ
		2.INDEST-AICTE Consortium	http://www. Paniit.iitd.ac.in/indest
		3.National Knowledge Resource Consortium (NKRC)	http://nkrc.niscair.res.in
		4.MICT (Ministry of Communication and Information Technology)Concortium	http://www.mcitconsortium.nic.in
		5.ERMED (Electronic Resources in Medicine) Consortium	http://ermed.jccc.in/
		6.DRDO E-journal Concortium	www.dsl.drdo.gov.in/ejournals

		7.DeLCON (Department of Biotechnology E-Library Consortium)	http://delcon.gov.in
		8.CeRA (Concortium for E-Resources in Agriculture)	http://cera.jccc.in
		9.NLIST (National Library and Information Services Infrastucture for Scholarly Content)	http://nlist.inflibnet.ac.in/
		10. DAE (Department of Atomic Energy) Consortium	……
7.	Digital Library of Newspaper	1.Times of India	http://epaper.timesofindia.com
		2.Indian Express	http://epaper.indianexpress.com
		3.Times	http://epaper.timesofindia.com
		4.DNA	http://epaper.dnaindia.com
		5.Dainik Bhasker	http://epaper.bhaskar.com
8.	Digital Library of Data Harvesting	1.Archive Search Service Indian Repository	……
		2.Initiative	……
		3.MetaMED	……
		4.Journal Publishing in Indexing and Management (SJPI)	……
		5.Search Digital Libraries (SDL)	……
9.	Traditional Knowledge Digital Library (TKDL)		www.tkdl.res.in
10.	Archives of Indian Labour		http://www.indialabourarchives.org/
11.	C-DAC Projects (Centre for Development of Advanced Computing)		http://cdac.in/index.aspx?id=mc_hc_digi_lib

Recently, UGC-INFONET Digital Library Consortium, INDEST-AICTE Consortium and NLIST (National Library and Information Services Infrastucture for Scholarly Content) are merged as E-ShodhSindhu: Consortium for Higher Education Electronic Resources for its member institutions. It is evident that some of the digital library initiatives are started as projects and some are encouraged and funded by Government of India namely- Ministry of Comunications and Information Technology, Department of Science and Technology, Department of Culture, Ministry of Human Resource Development (UGC), Department of Atomic Energy, Ministry of Defence. Moreover, research institution, universities, enterprises and publishers are also actively involved in digitizing their respective resources so that more people/user can access the same.

Though digital libraries are growing, the very mechanism needs some specific guildelines or policies for consistent and uniform development of the same. As in our country, India, there is no definite digitization policies/ standard. The institutions/organizations confronts some hurdles to address the problems concerning to the digitization. Hereby, process of ditization is not taking expected pick-up.

Conclusion

In developed countries, the governments realise the need and importance of the libraries in building nation and enriching the people with information and knowledge so that they can have an active participation as a well informed and knowledgeable citizen which can be instrumental in overall growth and development of the country. As libraries are the social institution, its resources and services are user oriented. Other than the academic libraries, libraries in general are not confined to the limited people. Its access is not restricted on the basis of caste, creed and colour of the user. Libraries are getting transformation to provide better and convenient services to the users. Libraries give exposer to ocean of information without giving any financial restriction in its use. Surely it can be one of the reliable, affordable, flexible, and convenient platforms for the information seekers. In other words, it is a gateway to the knowledge society, where knowledge is invaluable and power.

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Open Access Scholarly Journals of Music: a study on DOAJ for the users of electronic environment

Narendra Bhattacharya
Subarna K. Das

Introduction

Open access is an initiative to distribute content through Web without any financial implications to the reader. Open Access is one step ahead of Free Access that holds dual promise to remove both price and permission barriers from scientific communication by using Internet which has brought enormous opportunity to bring the results of research primarily to all through digital communication – anyone, anywhere and anytime. The impact of convergence of tradition and technology brings the facility of accessing information conveniently and instantaneously (Nagaraj et al , 2016).

The term open access was first used in 2001 when the Open Society Institute established what is known as the Budapest Open Access Initiative (BOAI). Their goal was to create a set of recommendations, which were designed to provide the public with unrestricted, free access to scholarly research. Since then, the term open access has been defined by different groups in different ways(Machado ,2013)

In general, open access stands for the free and permanent access to published research, combined

with clear guidelines for readers to share and use the content.

Open Access Journals

Open access journals are e-journals that are freely available (some open access journals have supplementary fee-based print versions as well).

They mirror the quality assurance practices of conventional journals, such as editorial oversight, peer review, and copy editing. OA journals perform peer review and then make the approved contents freely available to the world. Their expenses consist of peer review, manuscript preparation, and server space

Among peer-reviewed journals, a key distinction is between those that provide free access to all of their contents ("gold" OA) and those that are subscription-based but allow authors to retain the right to place their work in an open-access repository ("green" OA).("Open access",2017)

Open – Access (OA) journals in music like other disciplines have greatly influenced the academic research in recent years. These journals basically cover a wide variety of subdusciplines , including music education , musicology, ethnomusicology, music theory , music performance, music therapy and some emphasize precisely on a particular musician or music genre(Testa , 2016).

Directory of Open Access Journals (DOAJ)

DOAJ is the most recognized and most authoritative list of scholarly, peer-reviewed, fully Open Access journals. More than 10 percent of the world's peer-reviewed journals are now included in DOAJ, making DOAJ among the world's largest collections of peer-reviewed scholarly journals, period.

The aesthetically pleasing and highly functionally DOAJ interface adds significantly to user confidence in DOAJ. The price (free) and contract terms (Open Access per the Budapest Open Access Initiative definition) cannot be beat. Minor suggestions for improvement include addition of an Advanced Search option, true keyword searching, and a user-friendly title list download option to facilitate creation of bibliographies of journals.

One of the strengths of DOAJ is its diversity, reflecting a much broader range of linguistic content and origin of research than typical Western-based journal packages.As a free service, including DOAJ in library services is recommended for all libraries, whether in journal A–Z lists, library catalogues, link resolvers, or Web sites. Subject-specific URLs can easily be generated for inclusion in subject guides and pathfinders.

DOAJ is growing rapidly, at a rate of more than one title per calendar day. DOAJ's highly functional and aesthetically pleasing interface features a number of search options, including a new search option for authors looking for open access or hybrid journals to publish in. DOAJ is not limited to particular languages or subject areas. According to DOAJ website,

presently it includes 124 countries, 9335 journals, and 2446726 articles in all subject areas combined. A search of journals in DOAJ with "music" as a keyword returns 58 journal titles, but many of these are for interdisciplinary journals that list music among several other art forms and subjects. The present study deals with 56 journals excluding (Dicle Medical Journal & Gazi Academic View) which exclusively falls under medical sciences. ("Directory of Open Access Journals", 2017)

Objectives of the study

1. To identify the open access journals offered by DOAJ in music & its allied disciplines
2. To investigate the year wise growth of open access journals in music
3. To identify the year of origin and the specific URLS through which these may be accessed
4. To find out the country & language wise distribution of e-journals
5. To find out the number of e-journals published in more than one language

Methodology

The research began with literature review on the Open Access movement. The Directory of Open Access Journals(DOAJ) (https://doaj.org) was accessed to collect the data related to the present study.Then the website of DOAJ is browsed for the present study. Open access journals related to music and its related areas were searched and identified. A total 58 journals were found under the search term music out of which 56 were selected excluding the Dicle Medical Journal and Gazi Academic View. These journals were analyzed on the basis of their year of origin, place of publication, languages in which they are available and their subject headings. **The collected data are explained and presented item-wise on the basis of different variables and with the help of charts, tables etc. Statistical techniques are used and tabulation formats were designed accordingly for analysis and interpretation.**

Analysis & Interpretations

Table- 1: Year-wise distribution of open access journals on music with URLs

Name of the Journal	Starting Year	URL
Anuario Musical	2001	anuariomusical.revistas.csic.
Act : Zeitschrift für Musik & Performance	2010	http://www.act.uni-bayreuth
Accelerando: BJMD	2016	http://accelerandobjmd.weebly.com
Action, Criticism and Theory for Music Education	2002	http://act.maydaygroup.org
Approaches: An Interdisciplinary Journal of Music Therapy	2009	http://approaches.gr
Approaches: Music Therapy & Special Music Education	2009	http:// approaches.primarymusic.gr
Arti Musices	2007	http://hrcak.srce.hr
Calle14: Revista de Investigación en el Campo del Arte	2007	http://revistas.udistrital.edu
Dancecult: Journal of Electronic Dance Music Culture	2009	https://dj.dancecult.net
Early Modern Culture Online	2010	http://journal.uia.no
Ethnomusicology Review	2011	http://ethnomusicologyreview.ucla.edu
Empirical Musicology Review	2012	http://emusicology.org
EURASIP Journal on Audio, Speech, and Music Processing	2006	http://asmp.eurasipjournals.springeropen.com
Gli Spazi della Musica	2012	http://www.ojs.unito
Harmonia: Journal of Arts Research and Education	2000	http://journal.unnes.ac.
Harmonia: Jurnal Pengetahuan dan Pemikiran Seni	2000	http://journal.unnes.ac.
Hellenic Journal of Music, Education, and Culture	2010	http://hejmec.eu
Information: Nordic Journal of Art and Research	2012	http://www.artandresearch.info
International Journal of Contemporary Composition	2012	http://www.ijournalcc.com
Journal of Aesthetics & Culture	2009	http://www.tandfonline.com
Journal of Jazz studies	2011	http://jjs.libraries.rutgers.edu
Journal of the Society for Musicology in Ireland	2005	http://www.musicologyireland.com

Journal of Sonic Studies	2011	http://sonicstudies.org
Media Industries	2014	http://www.mediaindustriesjournal.org
Music Performance Research	2007	http://mpr-online.net
Music Theory Online	1993	http://www.mtosmt.org
Musica e Tecnologia	2007	http://www.fupress.net
Música Oral del Sur	1995	http://www.centrodedocumentacionmusicaldeandalucia.es
Musicologica Austriaca	2015	http://www.musau.org
Musicology Today	2013	https://www.degruyter.com
Musikterapi i psykiatrien online	1998	https://journals.aau.dk
Muzikologija	2002	http://www.doiserbia.nb
Mediamuzyka	2012	http://mediamusic-journal.com
Musica Docta	2011	https://musicadocta.unibo.it
Musical Offerings	2010	http://digitalcommons.cedarville.edu
New Voices	2006	http://newvoices.org.au
New Voices in Japanese Studies	2015	http://newvoices.org.au
Ondokuz Mayıs University Journal of Education	2009	http://dergipark.ulakbim.gov.
Pacific Review of Ethnomusicology	1984	http://ethnomusicologyreview.ucla.edu
Per Musi	2010	http://www.scielo.br
Philomusica	2001	http://www.paviauniversitypress.it
Music Scholarship / Problemy Muzykal'noj Nauki	2009	http://journalpmn.com/index.php
PsyArt	1997	http://www.psyartjournal.com
Resital: Jurnal Seni Pertunjukan	2008	http://journal.isi.ac.id/index.php
Revista Eixo	2012	http://revistaeixo.ifb.edu.br
Revista Electrónica Complutense de Investigación en Educación Musical - RECIEM	2004	http://revistas.ucm.es
Revista Electrónica de LEEME	1998	http://musica.rediris.es
Revista Internacional de Educación Musical	1945	http://www.revistaeducacionmusical.org
Revista Musical Chilena	1945	http://www.revistamusicalchilena.uchile
Revue LISA	2003	http://lisa.revues.org
Revista Portuguesa de Educação Artística	2011	http://www.recursosonline.org
Revista Vortex	2013	http://www.revistavortex.com
Sound Effects	2011	http://www.soundeffects.dk
The Scottish Journal of Performance	2013	http://www.scottishjournalofperformance.org
Translingual Discourse in Ethnomusicology	2015	https://www.tde-journal.org
Voices: A World Forum for Music Therapy	2001	https://voices.no/index.php

Table- 2: Year wise growth of Journals (2000 – 2016)

Sl.No.	Year	No. of Journals	Percentage
1.	2000	2	3.57
2.	2001	3	5.35
3.	2002	2	3.57
4.	2003	1	1.78
5.	2004	1	1.78
6.	2005	1	1.78
7.	2006	2	3.57
8.	2007	5	8.92
9.	2008	1	1.78
10.	2009	6	10.71
11.	2010	5	8.92
12.	2011	6	10.71
13.	2012	6	10.71
14.	2013	3	5.35
15.	2014	1	1.78
16.	2015	3	5.35
17.	2016	1	1.78
Total		49	

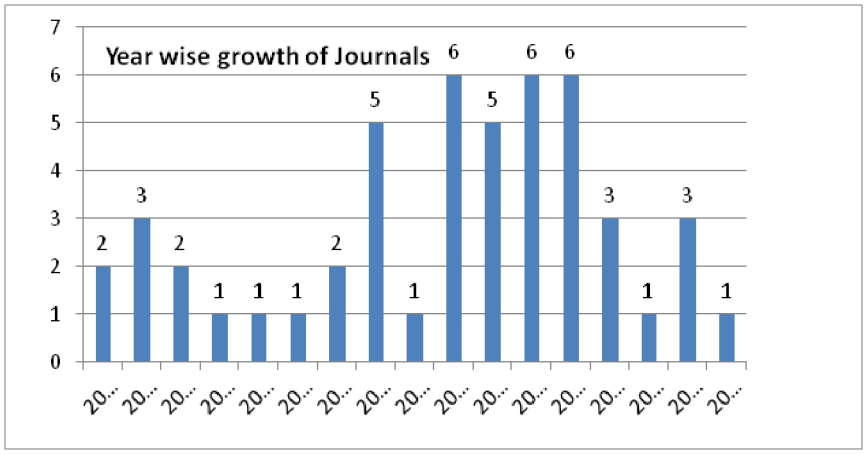

Fig-1: Year wise growth of Open Access journals

Table 2 indicated the year wise growth of open access journals of music. From the above study, in 2009, 2011 and 2012 there are highest 6 (10.71%) number of open access journals of music were identified followed by in 2007 and 2010 there are 5 (8.92%) were identified . Next to this in 2001, 2013 and 2015 there are 3 (5.35%) followed by in the years 2000 , 2002 and 2006 there are 2 (3.57%) of open access journals were identified. The remaining years show only moderate growth in this regard.

Table- 3: List of Open Access Journals of Music

Title of the Journal	ISSN/E-ISSN	Publishers
Accelerando: BJMD	ISSN: 2466-3913 (Online)	Belgrade Center for Music and Dance
Act : Zeitschrift für Musik & Performance	ISSN: 2191-253X (Print)	Universität Bayreuth
Action, Criticism and Theory for Music Education	ISSN: 1545-4517 (Print)	The MayDay Group
Anuario Musical	ISSN: 0211-3538 (Print); 1988-4125 (Online)	Consejo Superior de Investigaciones Científicas
Approaches: An Interdisciplinary Journal of Music Therapy	SSN: 2459-3338 (Print); 2459-3338 (Online)	X
Approaches: Music Therapy & Special Music Education	ISSN: 1791-9622 (Print); 2459-3338 (Online)	X
Arti Musices	ISSN: 0587-5455 (Print); 1848-9303 (Online)	Hrvatsko muzikološko društvo / Croatian Musicological Society
Calle 14: Revista de Investigación en el Campo del Arte	ISSN: 2011-3757 (Print); 2145-0706 (Online)	Universidad Distrital Francisco José de Caldas
Dancecult: Journal of Electronic Dance Music Culture	ISSN: 1947-5403 (Online)	Griffith University
Early Modern Culture Online	ISSN: 1892-0888 (Online)	University of Agder
Empirical Musicology Review	ISSN: 1559-5749 (Online)	Ohio State University Libraries
Ethnomusicology Review	ISSN: 2164-4578 (Print)	University of California (UCLA)
EURASIP Journal on Audio, Speech, and Music Processing	ISSN: 1687-4714 (Print); 1687-4722 (Online)	Springer
Gli Spazi della Musica	ISSN: 2240-7944 (Print)	Università degli Studi di Torino
Harmonia: Journal of Arts Research and Education	ISSN: 2541-1683 (Print); 2541-2426 (Online)	Universitas Negeri Semarang
Harmonia: Jurnal Pengetahuan dan Pemikiran Seni	ISSN: 1411-5115 (Print)	Universitas Negeri Semarang
Hellenic Journal of Music, Education, and Culture	ISSN: 1792-2518 (Print)	Greek Association of Primary Music Education Teachers
Information: Nordic Journal of Art and Research	ISSN: 1893-2479 (Online)	Oslo and Akershus University College of Applied Sciences
International Journal of Contemporary Composition	ISSN: 2304-4098 (Online)	International Association for Academic Research
Journal of Aesthetics & Culture	ISSN: 2000-4214 (Online)	Co-Action Publishing

Journal of Jazz studies	ISSN: 2158-1401 (Online)	Rutgers University Libraries
Journal of the Society for Musicology in Ireland	ISSN: 1649-7341 (Print)	Society for Musicology in Ireland
Journal of Sonic Studies	ISSN: 2212-6252 (Online)	Leiden University Press (LUP)
Media Industries	SSN: 2373-9037 (Online)	Media Industries Editorial Collective
Mediamuzyka	ISSN: 2226-6143 (Online	Mediamusic, LLC
Music Performance Research	ISSN: 1755-9219 (Print)	: Royal Northern College of Music
Music Theory Online	ISSN: 1067-3040 (Online)	Society for Music Theory
Musica Docta	ISSN: 2039-9715 (Print)	University of Bologna
Musica e Tecnologia	ISSN: 1974-0042 (Print); 1974-0050 (Online)	Firenze University Press
Música Oral del Sur	ISSN: 1138-8579 (Print)	Centro de Documentación Musical de Andalucía
Musical Offerings	ISSN: 2330-8206 (Print); 2167-3799 (Online)	Department of Music and Worship,Cedarville University
Musicologica Austriaca	ISSN: 1016-1066 (Print); 2411-6696 (Online)	Österreichische Gesellschaft für Musikwissenschaft
Musicology Today	ISSN: 1734-1663 (Print); 2353-5733 (Online)	: De Gruyter Open
Musikterapi i psykiatrien online	ISSN: 2245-3342 (Online)	Aalborg University Press
Muzikologija	ISSN: 1450-9814 (Print)	Serbian Academy of Sciences and Arts
New Voices	1833-5233 (Print); 2204-194X (Online)	The Japan Foundation, Sydney
New Voices in Japanese Studies	ISSN: 2205-3166 (Online)	The Japan Foundation, Sydney
Ondokuz Mayıs University Journal of Education	ISSN: 1300-302X (Print)	Ondokuz Mayıs University
Pacific Review of Ethnomusicology	ISSN: 1096-1291 (Print); 2151-7045 (Online)	University of California (UCLA)
Per Musi	ISSN: 1517-7599 (Print)	Escola de Música da UFMG
Philomusica	ISSN: 1826-9001 (Print)	Pavia University Press
Problemy Muzykal′noj Nauki (Ufa)	ISSN: 1997-0854 (Print)	Ufa State Academy of Arts named after Zagir Ismagilov

PsyArt	ISSN: 1088-5870 (Print)	Institute for Psychological Study of the Arts
Resital: Jurnal Seni Pertunjukan	ISSN: 2338-6770 (Print); 2085-9910 (Online	Institut Seni Indonesia Yogyakarta
Revista Eixo	2238-9504 (Print); 2238-5630 (Online)	Instituto Federal de Educação, Ciência e Tecnologia de Brasília
Revista Electrónica Complutense de Investigación en Educación Musical	ISSN: 1698-7454 (Print)	Universidad Complutense de Madrid
Revista Internacional de Educación Musical	ISSN: 2307-4841 (Online)	International Society for Music Education
Revista Electrónica de LEEME	ISSN: 1575-9563 (Online)	Jesus Tejada and Universidad de Valencia
Revista Musical Chilena	ISSN: 2307-4841 (Online)	International Society for Music Education
Revista Portuguesa de Educação Artística	ISSN: 1647-905X (Print)	Direção de Serviços de Educação Artística e Multimédia
Revista Vortex	ISSN: 2317-9937 (Online)	Universidade Estadual do Paraná
Revue LISA	ISSN: 1762-6153 (Print)	Maison de la Recherche en Sciences Humaines
Sound Effects	ISSN: 1904-500X (Print)	Aarhus University
The Scottish Journal of Performance	ISSN: 2054-1953 (Print); 2054-1961 (Online)	Royal Conservatoire of Scotland
Translingual Discourse in Ethnomusicology	ISSN: 2312-2528 (Online)	: Department of Musicology at the University of Vienna and Department of Ethnomusicology, University of Music and Performing Arts Graz, Austria
Voices: A World Forum for Music Therapy	ISSN: 1504-1611 (Print)	University of Bergen. Antioch University

Table – 4: Mode of Availability of journals

Sl.No.	Mode	No. of journals	Percentage (%)
1.	Print	21	37.5
2.	Online	19	33.92
3.	Print + Online	16	28.57

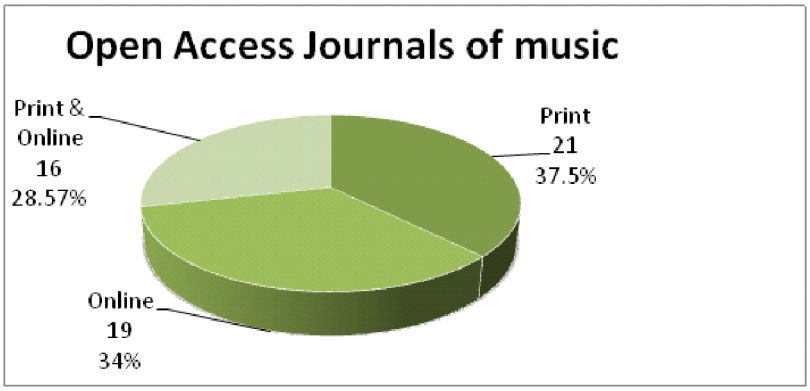

Fig -2 : Mode of availability of Open Access journals

Table 4 depicts the mode of open access journals accessible in DOAJ.The investigation shows that 21(37.5%) journals are available in print version followed by 19 (33.92%) in online . Only 16 (28.57%) journals are available in DOAJ as both print and online version

Table -5: Country & Language wise distribution of journals of Music

Title of the journal	Country	Language	Format
Accelerando: BJMD	Serbia	English	PDF, HTML
Act : Zeitschrift für Musik & Performance	Germany	German, English	PDF
Action, Criticism and Theory for Music Education	United States	English	PDF, HTML
Anuario Musical	Spain	Portuguese, German, French, Catalan; Valencian, English, Spanish; Castilian, Italian	PDF
Approaches: An Interdisciplinary Journal of Music Therapy	(United Kingdom)	English	PDF
Approaches: Music Therapy & Special Music Education	(United Kingdom)	English	PDF
Arti Musices	Croatia	English, Croatian	PDF
Calle 14: Revista de Investigación en el Campo del Arte	Colombia	Spanish; Castilian	PDF, HTML
Dancecult: Journal of Electronic Dance Music Culture	Australia	English	PDF, HTML
Early Modern Culture Online	Norway	German, English	PDF
Empirical Musicology Review	United States	English	PDF
Ethnomusicology Review	United States	English	Word
EURASIP Journal on Audio, Speech, and Music Processing	Germany	English	Word, PDF

Gli Spazi della Musica	Italy	Italian, English	PDF
Harmonia: Journal of Arts Research and Education	Indonesia	English	PDF
Harmonia: Jurnal Pengetahuan dan Pemikiran Seni	Indonesia	English	PDF
Hellenic Journal of Music, Education, and Culture	Greece	Greek, English	PDF
Information: Nordic Journal of Art and Research	Norway	Swedish, Norwegian English	PDF
International Journal of Contemporary Composition	Israel	Italian, English	PDF
Journal of Aesthetics & Culture	Sweden	English	PDF, HTML, Epub, XML
Journal of Jazz studies	United States	English	PDF
Journal of the Society for Musicology in Ireland	Ireland	NF	NF
Journal of Sonic Studies	Netharlands	English	HTML
Media Industries	United States	English	PDF HTML
Mediamuzyka	Russian Federation	Russian, English	PDF HTML
Music Performance Research	United Kingdom	English	PDF
Music Theory Online	United States	English	PDF HTML
Musica Docta	Italy	German, Spanish; Castilian, Italian, French, English	PDF
Musica e Tecnologia	Italy	English	PDF
Música Oral del Sur	Spain	Portuguese, Spanish; Castilian, French, English	PDF
Musical Offerings	United States	English	PDF
Musicologica Austriaca	Austria	English	PDF, HTML
Musicology Today	Poland	English	PDF
Musikterapi i psykiatrien online	Denmark	Norwegian, Danish, Swedish, English	PDF
Muzikologija	Serbia	German, English, Serbian	PDF
New Voices	Australia	English	PDF, HTML
New Voices in Japanese Studies	Australia	English	PDF, HTML
Ondokuz Mayıs University Journal of Education	Turkey	English	PDF
Pacific Review of Ethnomusicology	United States	English	PDF
Per Musi	Brazil	Portuguese, Spanish; Castilian, English	PDF, HTML, XML
Philomusica	Italy	German, English, French, Italian	PDF
Problemy Muzykal′noj Nauki (Ufa)	Russian Federation	Russian	PDF
PsyArt	United States	English	Word
Resital: Jurnal Seni Pertunjukan	Indonesia	Indonesian, English	PDF
Revista Eixo	Brazil	Portuguese	PDF
Revista Electrónica Complutense de Investigación en Educación Musical	Spain	Spanish, English	PDF

Revista Internacional de Educación Musical	Spain	Spanish, Castilian, English	PDF
Revista Electrónica de LEEME	Australia	Spanish, Castilian	PDF
Revista Musical Chilena	Chile	Spanish, Castilian	PDF
Revista Portuguesa de Educação Artística	Portugal	Portuguese	PDF
Revista Vortex	Brazil	Portuguese, Spanish; Castilian, English	PDF
Revue LISA	France	French English	PDF, HTML, XML
Sound Effects	Denmark	English	PDF
The Scottish Journal of Performance	United Kingdom	English	PDF, HTML
Translingual Discourse in Ethnomusicology	Austria	English	PDF, HTML
Voices: A World Forum for Music Therapy	Norway	English	HTML

Table – 6 : Country wise distribution of Open Access journals

Sl.No.	Country	No. of journals	Percentage (%)
1.	United States	9	16.07
2.	United Kingdom	4	7.14
3.	Spain	4	7,14
4.	Australia	4	7.14
5.	Italy	4	7.14
6.	Spain	4	7.14
7.	Indonesia	3	5.35
8.	Norway	3	5.35
9.	Brazil	3	5.35
10.	Germany	2	3.57
11.	Serbia	2	3.57
12.	Austria	2	3.57
13.	Denmark	2	3.57
14.	Russian Federation	2	3.57
15.	France	1	1.78
16.	Greece	1	1.78
17.	Israel	1	1.78
18.	Sweden	1	1.78
19.	Chillie	1	1.78
20.	France	1	1.78
21.	Ireland	1	1.78
22.	Netharland	1	1.78
23.	Poland	1	1.78
24.	Portugal	1	1.78
25.	Turkey	1	1.78
26.	Ireland	1	1.78

Table-6 presents the country wise distribution of open access journals. It shows that United states contributes highest 9 (16.07%) of open access journals followed by United Kingdom, Australia, Italy and Spain with 4 (7.14%) of open access journals. Indonesia , Norway and Brazil contributes 3 (5.35%) of open access journals respectively. Next to this are Germany, Serbia, Austria and Denmark & Russia contribute 2 (3.57%) of open access journals in DOAJ.The remaining countries show only moderate contributions in this regard.

Table – 7 : Language wise distribution of Journals

Sl.No.	Language	No. of journals	Percentage (%)
1.	English	48	85.71
2.	Spanish	8	14.28
3.	Castilian	8	14.28
4.	German	6	10.71
5.	Portuguese	6	10.71
6.	French	5	8.92
7.	Italian	4	7.14
8.	Norwegian	2	3.57
9.	Russian	2	3.57
10.	Swedish	2	3.57
11.	Catalan	1	1.78
12.	Valencian	1	1.78
13.	Croatian	1	1.78
14.	Danish,	1	1.78
15.	Indonesian,	1	1.78
16.	Greek,	1	1.78
17.	Serbian	1	1.78
18.	Catalan	1	1.78

Table- 7 shows Language wise distribution of Open Access journals. In English 48 (85.71%) journals are published followed by Spanish & Castilian with 8(14.28%) and German and Portuguese with 6(10.71%) of journals. In French & Italian language only 5 (8.92%) & 4 (7.14%) journals are available. The remaining languages have moderate publications in this regard**.**

Major Findings of the study

* DOAJ offers 56 Open Access journals on music and its related areas.

* The present study reveals that in 2009, 2011 and 2012 the highest 6 (10.71%) numbers of open access journals of music were identified.

* The journals are available in print, online and dual versions. The mode of availability indicates 21 (37.5%) print, 19 (33.92%) online and 16 (28.57%) in print + online journals.

* Majority of journals are available in PDF format.

* United States secures highest number of journal publications.

* It has been revealed that maximum journals are published in English Language.

* A majority number of journals are published in one language

Conclusion

The Directory of Open Access Journals is a significant web resource of open access scholarly journals and has developed a well deserved reputation for quality gateway to scholars , researchers and professionals of various disciplines for wider communication of their study and research.

It is the world's most authoritative list of fully open access peer reviewed titles. Journals in DOAJ cover a full range of academic areas. The precise number of titles can easily be determined by following the subject tree .The size of the title list in DOAJ is very impressive for the benefit of the users of e-community.

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28

From Libraries To Knowledge Centers To Knowledge Gateways

Jolly Varghese U

Intorduction

The UNESCO Manifesto on Public Libraries (1994) says, "The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision-making and cultural development of the individual and social groups."

The National Knowledge Commission (NKC), constituted on 13th June 2005 by the then Prime Minister of India Dr. Manmohan Singh as the high-level advisory body to the Prime Minister of India and with the objective of transforming India into a vibrant knowledge-based community focuses on the following five key areas of the knowledge: (1) knowledge concepts, (2) access to knowledge, (3) knowledge-creation, (4) knowledge application and (5) development of better knowledge services. For this goal, the commission recognized the libraries of India as rich repositories and resources of knowledge. Naturally, one of the central objectives of the commission was to analyse the constitution and services of the various types of libraries, with a goal to "transform libraries from guarded storehouses of publications into open stockpiles of knowledge." (NationalKnowledgeCommission, 2007) The title of the NKC report on libraries, "Libraries: Gateways to Knowledge" is itself a statement on the importance of libraries. The Foreword to the NKC report states, "Libraries have a recognized social function in making knowledge publicly available to all. They serve as local centres of information and learning and are local gateways to national and global knowledge." (National Knowledge Commission, 2007)

Beyond the borders of India and across the seas, a specially-designed 18-wheeler truck which brought treasures of information from the Library of Congress to the cities and towns of America is another great message writ large for all to read on the international stage. The truck was named "Library of Congress – Gateway to Knowledge." This exhibition on wheels, started in September 2010, carried its truckload of information moving across the Midwest, South, and Northeast of USA., and completed its round-trip in September 2011 at the Library of Congress. (Libraryof Congress, Gateway to Knowledge:The Library's rolling exhibition, 2010)

Evolution of Libraries

Libraries collect the history of the human activity on our planet earth. The invention of the writing system, approximately 5300 years ago, may be considered beginning of that history. Prior to this period and back to 3.3 million before our times, when hominines began to use the first stone tools we have the pre-historic period. (Renfrew, 2007)

The history of libraries cannot be but recent across the vast expanse of human presence in the pre-historic age. The ancient libraries take us back to 2600 BC and to Sumer, in Mesopotamia (in the present-day Sothern Iraq). There we see first libraries with clay tablets in cuneiform script. (Casson, 2002) There are evidences of such libraries in various places of ancient civilization, like Ugarit (ancient port city in Northern Syria), Nippur (one of the most ancient Sumerian cities), Nineveh (one of ancient Assyrian cities).The Nineveh library shows the existence of a classification system. (Encyclopedia, 1954)

The library of Ashurbanipal, King of Assyria (c. 668-630 BC) is the oldest Royal library that was survived to our times. There are more than 30,000 cuneiform tablets and fragments at his capital, Nineveh (modern Kuyunjik). Besides historical inscriptions, there are administrative and legal texts, and letters as well as thousands of divinatory, magical, medical, literary and lexical texts. This is treasure-house of learning and it holds unprecedented importance to the modern study of human civilizations. (TheBritishMuseum, 2018) No human growth and development is possible without linking and bridging the past with the present; a look over the shoulders at the past lets us chart a course into the future. With such a view and with the hope to be able open Ashurbanipal's library to new readers, the British Museum undertook 'the Ashurbanipal Library Project' with a goal to bring Ashurbanipal's astonishing library back to life with the help of modern technologies.

Among the great libraries of the ancient world, the library of Alexandria in Egypt stands renowned and occupies prime position with its size and significance. The Alexandrian Library was conceived and made open to the scholarly people during the period 323-246 BC, duing the reign of either of Ptolemy I or Ptolemy II.

History shows that it was a matter of prestige for emperors to build, maintain and develop libraries. Gaius Julius Aquila built Library of Celsus in Ephesus, Roman Emperor Asinius Pollio built Rom's first public library, Emperor Augustus, and Emperor Tiberius of Han Dynasty of China built libraries. (Casson, 2002) (Houston, 2008). Demetrius, a Greek King, built a universal library to hold copies of all the books in the world. "Ptolemy and his successors wanted to understand the people under their rule and they housed Latin, Buddhist, Persian, Hebrew and Egyptian works – translated into Greek." (Krasner-Khait, 2001).

As we come to more recent times, we find that more and more libraries were founded and nurtured by various rulers and kingdoms in various countries. The European Middle Ages was a time when different types of libraries appeared on the scene. We can speak of four types of libraries of thie period: (1) imperial, (2) patriarchal, (3) monastic and (4) private libraries. Each had a specific purpose and, as a result, their survival varied. We can see a direct relationship between the growth of Christianity and the growth of libraries in the West. "After the Roman Empire disintegrated and the contents of its grand libraries were destroyed or dispersed, monasteries emerged throughout Europe and gathered remnants of these ancient libraries. One key activity of many of these monasteries was the copying of Bible manuscripts, as well as others, by hand. The Benedictine monasteries, for example, which lived by the "Rule of St. Benedict," commanded the reading and copying of books." (Awake, 2005) Historian Elmer D. Johnson says: "The role of the monastery library in the preservation of Western culture cannot be denied. For more or less a thousand years, it was the intellectual heart of Europe, and without it western civilization would have been a far different world." (Johnson, 1966) One of the most important monastery libraries was the library at the abbey of Montecassino founded by St. Benedict around 529 AD in Italy.

Libraries of the 21st century

With the advent of the Printing Press and the spread of literacy and modern educaiton, libraries grew in number and in size. They also took on special features and characteristics. Thus, according to the mode of service

rendered to the users, libraries may be categorized into Academic, Special, Public and National Libraries. Academic Libraries, in their turn, may be school, college and university libraries.

A look at the biggest libraries of the present century can be quite revealing:

The Library of Congress

The Library of Congress, established in 1800, is the largest library in the world, with more than 167 million items on approximately 838 (1349 km) miles of bookshelves. The collection includes more than 39 million books and other printed materials, 3.6 million recordings, 14.8 million photographs, 5.5 million maps, 8.1 million pieces of sheet music and 72 million manuscripts. This library receives 15,000 items each working day.

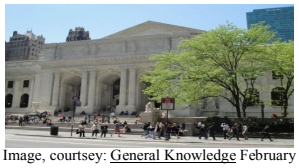
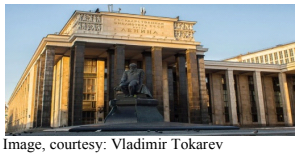
The collection contains materials in about 470 languages. It holds the largest rare-book collection in North America (more than 700,000 volumes), including the largest collection of 15th-century books in the Western Hemisphere. The collection also includes the first known book printed in North America, "The Bay Psalm Book" (1640). The oldest written material in the Library is a cuneiform tablet dating from 2040 B.C. The Library's Prints and Photographs Division contains more than 15 million visual images, including the most comprehensive international collection of posters in the world, the most comprehensive visual record of the Civil War, and pioneering documentation of America's historic architecture. More than 1.2 million images of Prints and Photographs are accessible online. (LibraryofCongress, Fascinating facts, 2018) The annual budget of the library is $ 684,040,000.

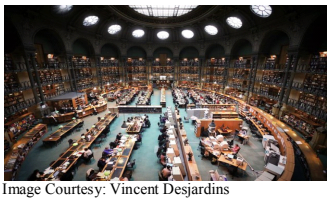
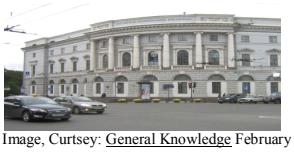
The Library of Congress is a gateway to knowledge, providing information on matters that are very ancient and most recent. Inofrmation on culture, art, science, technology, medicine, engineering, cinema, literature, folklore, music, comedy and newspapers are all preserved here systematically and with easy access.

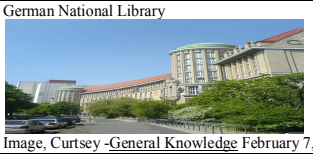
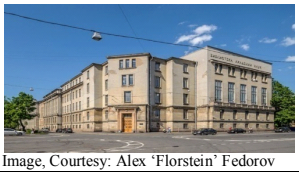
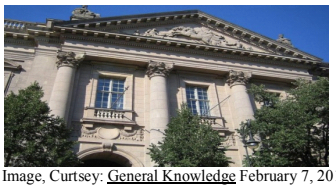
The British Library

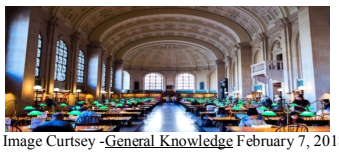
Established in the year 1973 (1753), the British Library holds the second position in the world for its size. On its 625 km of shelves, which grows by 12 km every year, are more than 150 million items, in most known languages. Each year 3 million new items reach this library. Over 16,000 people use the collections each day (onsite and online). It has 1200 onsite seating arrangement for the readers. The library operates the world's largest document delivery service providing millions of items a year to the users all over the world. The treasures of the library include Magna Carta, Lindisfarne Gospels, Leonardo da Vinci's Notebook, the first edition of The Times from 18 March 1788, Beatles manuscripts and the recording of Nelson Mandela's Rivonia trial speech. (BritishLibrary, 2018)

Besides the Library of Congress and the British Library, there are a number of libraries which can claim similar honor and importance in sharing knowledge and turning societies into knowledge societies. They are given below in the descending order of their size.

SL. NO	Name of the library (with image)	Important facts and figures
1	New York Public Library  Image, courtsey: General Knowledge February 7, 2018	• **Established 1895** • **The stacks contain 125 miles of shelves** • **The number of Library visitors on opening day in 1911** • Most visited library in the world with annual visit of 37 million people • **Hold a 1493 unique copy of Columbus's letter announcing his discovery of the New World** • **Annual Budget :** US $ 302,208,000 (2017)
2	Library and Archives Canada (Wikipaedia, 2018) Image, courtesy: Padraic Ryan	• Established in the 2004 • 20 million books, periodicals, newspapers, microfilms, literary texts and government publications • 167,000 linear metres of government and private textual records • 3 million architectural drawings, maps and plans • 24 million photographs • 350,000 hours of film • 425,000 pieces of art, including paintings, drawings, watercolours, posters, prints, medals and caricatures • 547,000 musical items; • More than a billion megabytes of digital content • Annual budget : C$98,346,695 (2013–14)
3	Russian State Library (RussianStateLibrary, 2018)  Image, courtesy: Vladimir Tokarev	• Established in the year 1862 • The Russian State Library comprises the unique domestic and foreign collections in 367 languages of the world. The size of all holdings exceeds 46 million items • More than 800 thousand people visit the library annually and about 100 thousand new library tickets are issued. • Budget: 1,740,000,000 (2012)
4	National Diet Library (NationalDietLibraryJapan, 2018) Image, curtsey: General Knowledge February 7, 2018	• Established in the year 1948 (1872 &)1890 • 41,881,649 items • Annual acquisition : 831184 • On site users - 722,062 (2015) • Number access to the website : 21,346,142 • Budget 18190 million yen for the year 2018

5	Bibliothèque nationale de France (wikipedia, 2018) (BnF, 2018)  Image Courtesy: Vincent Desjardins	• Established in the year 1461 • Rare Books Reserve holds approximately 200,000 volumes selected for being rare editions or unique copies, from the Gutenberg Bible (around 1455) to the most contemporary books. reliure.bnf.fr database provides access to a selection of digitized bookbindings from collections of the Rare Books Reserve • Gallica, the digital library for online users, was established in October 1997. As of October 2017, Gallica had made about 4,286,000 documents, 533,000 books, 131,000 maps, 96,000 , manuscripts, 1,208,000 images, 1,907,000 newspapers and magazines, 47,800 sheets of music, 50,000 audio recordings, 358,000 objects available on the Web. • 40 million catalogue entries • Budget € 254 million
6	National Library of Russia (TheNationalLibraryofRussia, 2018)  Image, Curtsey: General Knowledge February 7, 2018	• Established in the year 1795 • Total number of items (2016): 37,890,000 • Total visit (2016) : 820,000 • Individual users who visited the web site (2016): 9,993,100 • Budget: 569,200,000 RUB ($ 23,400,000)
7	National Library of China Image, Curtsey: General Knowledge February 7, 2018	• Established in the year 1909 • **Total collection : 37,686,187 items** • **With a collection of over 37 million items, it is the largest library in Asia**
8	The Royal Library of Denmark **(Wikipedia, Royal Libray, Denmark, 2018)** Image, Courtesy: Arne List	• Established in the year 1648. In 1989, it was merged with the prestigious Copenhagen University Library (founded in 1482) • With a collection of 35 million items, it is the largest libray among Nordic countries (Northern Europe and the North Atlantic) • As of 2015 the collection exceeds 35 million items

9	National Library of Spain **(Wikipedia, Biblioteca Nacional de España, 2018)** Image, Courtesy: Jean-Pierre Dalbéra	• Established in the year 1712 • Collection: 26,000,000 items, including 15,000,000 books and other printed materials, 30,000 manuscripts, 143,000 newspapers and serials, 4,500,000 graphic materials, 510,000 music scores, etc • Budget: € 47,380,860 • Users: 115,707 readers in 2007. The number of web users in the same year was 1,800,935.
10	German National Library  Image, Curtsey -General Knowledge February 7, 2018	• Established in the year 1912 • Collection: as on 2016 32.7 million items • Budget: 52.3 million € (2016)
11	Library of the Russian Academy of Sciences (Wikipedia, Library of the Russian Academy of Sciences, 2018)  Image, Courtesy: Alex 'Florstein' Fedorov	• Established in the year 1714 • Collection 20.5 million items
12	Berlin State Library  Image, Curtsey: General Knowledge February 7, 2018	• Established in the year 1661 • Size of the Library: 23,110,423 items; consists of 12.3 million books; 206,700 rare books; 60,100 manuscripts; music autographs; 1,600 estate archives; 25,000 periodicals; 180,000 newspaper volumes; 4,300 databases; 2.7 million microfilms; 13.5 million images at the bpk (The Prussian Heritage Image Archive) • Budget: € 16,000,000

13	Boston Public Library **(BostonPublicLibrary, 2018)**  Image Curtsey -General Knowledge February 7, 2018	• Established in the year 1848 • Boston Public Library is a pioneer of public library service in America • All firsts in: It was the first large free municipal library in the United States, the first public library to lend books, the first to have a branch library, and the first to have a children's room • In the year 2017: 38,18,883 Visitors, 23 million items in the collection, 49,33,786 items borrowed, 32900 items digitized,16,28,324 downloads, 82911 new card holders, 12665 new programmes and 98,39,461 visit to bpl.org
14	Culcutta Public Library Image, Curtsey:Wikipedia	• Established in the year 1903 • Over 2,270,000 books • Over 86,000 maps • Over 3,200 manuscripts • Over 45 kilometers of shelf space • Reading rooms can accommodate over 550 people

As the present-day libraries are not merely collection of books and reading materials, but also provide access to all these collections to the public, they rightly be considered gateways to knowledge. They provide a wealth of fascinating information about persons, events, developments, literature and a host of other areas of knowledge. The modern world churns out information at a mind-boggling rate, and it is not easy for individuals to to have access to all the information unless it is available to him at some centre. Libraries are such collection centers of all such information that is being generated in the world, and which in turn makes it available to the public according to their need and time.

Libraries as knowledge centres:

"A library is not a building stacked with books; it is a repository and source of information and ideas, a place for learning and enquiry, and for the generation of thought and the creation of new knowledge. Public libraries in particular have the potential to bridge the gap between the 'information poor' and the 'information rich' by ensuring that people from all sectors and settings of society and the economy across have easy access to knowledge they seek." (NationalKnowledgeCommission, 2007) Libraries have come a long way since Alexandria. If they disappear at one point of time, we would miss cultural and knowledge traditions dating back to hundreds of years.

We have modern libraries with a history of more than six hundred years. Majority of the national libraries have a history of one or two centuries. They will have rare documents, information on literature, culture, development, health, economics, education, science, technology, folklore and a host other fields of knowledge, some of which may be available nowhere else in this world. These libraries are knowledge centers, where the knowledge created in the world is collected and arranged orderly with the sole purpose of retrieving it as and when it is needed. The British writer Caitlin Moran, narrates the importance of library in a poetic way:

A library in the middle of a community is a cross between an emergency exit, a life raft and a festival. They are cathedrals of the mind; hospitals of the soul; theme parks of the imagination. On a cold, rainy island, they are the only sheltered public spaces where you are not a consumer, but a citizen, instead. … (Norfolk & Stenson, 2017)

Libraries as knowledge gateways

Libraries survive not only because of the rare collections in them, but also because they imbibe the changes which are required of them from time to time. In this age of information society which is greatly influenced by the developments in the Information communication Technology, libraries and librarians strive to cope with these changing demands. As Dr. S. R. Ranganathan, the Father of Library Science of India, has rightly said in his famous five laws of library science, Libraries are growing organism. We can see libraries that grow gigantically in physical size. At the same time no library can survive without appropriate growth in other dimensions proper to the times.

Libraries gives us best hope for the controlled release of information, and librarians are the trusted gatekeepers with professional training to cluster, classify, index and preserve the universe of knowledge. They provide orderly and easy access to information resources. A tech-savvy librarian with additional capability and competency to handle the Information and Communication Technology is in a position to repackage the whole universe of knowledge produced, into small reusable valid information units which will help someone who needs it to access that knowledge pin-pointedly within a short amount of time. Classification, cataloguing, indexing, abstracting services, bibliographic services, reference services, inter-library loan services, digital preservations of the documents and information add importance to the libraries.

As the generation of knowledge is very large and the task of search it difficult, it becomes the duty of the librarian to make the process simple through specialized library services. According to Dr. S. R. Ranganathan, "Reference service is the process of establishing contact between a reader and his documents in a personal way." It is providing right information to the right reader at the right time in a right personal way. So the librarian acts as a gatekeeper who has the responsibility to let readers get into the world of information that is accessed, arranged, preserved and stored systematically in the library, whether in physical format or in digital format, and help them to come in contact with the relevant piece of information which is required for the person at the moment. Time and timeliness are essential! The right piece of information at the right time is priceless.

The National Knowledge Commission of India observes rightly that, "The ability of a nation to use and create knowledge as capital determines

its capacity to empower and enable its citizens by increasing human capabilities." To respond to global challenges of 21st century, the country needs a knowledge-oriented paradigm of development to give its people and institutions a competitive advantage in all fields of knowledge. In this drive for knowledge based development, libraries can act as 'pillars of civilization' (Mauk & Oakland, 2017) and 'memory of mankind.' (Hessel, 2001). Indeed. Libraries are the treasure houses and historical memories of civilization as well as the gateways to the organized knowledge treasures.

Conclusion

Adetoun A Oyelude (Adetoun 2012) made a survey to examine libraries are gateways to knowledge or gatekeepers in the digital knowledge environment. The study reports the social implications of libraries as gateways or gatekeepers in the following words:

"With libraries as gateways and gatekeepers, society will be able to have improved library services and assured of access with the new digital publishing dynamics in a balanced environment." (Adetoun A. Oyelude, 2012)

The 21st century is set to witness a paradigm shift in the role of libraries because of the emergence of information communication technology. Libraries are now pathways to high quality information in a variety of electronic media and information services. The universe of knowledge is gathered in the library in different formats, modes and media. Nations and organizations invest huge sums in the libraries to organize the collection. The policy framework of libraries enable the easy, legal and rich collection development in libraries, as well as sharing the organized treasure with the public. The gates are open! Let libraries march ahead of the fast-progressing world, gathering the wealth of knowledge that is being generated at a mind-spinning speed and make it available to any hungry mind, thus showing and leading humanity's path ahead and into the future.

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A Report on: UGC Major Research Project on Establishment of Model North East India University Library Network (NEIULIBNET)

Narendra Lahkar

0. Preliminary

The University Grants Commission vide its Ref: MRP-MAJOR-LIBR-2013-25925 (GENERAL) Dt October, 2015 had sanctioned for a Major Research Project on the subject cited above to the Department of Library and Information Science, GU with Prof Narendra Lahkar as its Principal Investigator. The project was of three year duration and on completion of its term on 30th June, 2018, the report is submitted to the UGC. The present write-up is prepared on basis of the final report submitted to the University Grants Commission.

1. Introduction

Library network is found to be very much effective in different works and services of a library establishment. Sharing of resources among member libraries, cooperative acquisition, searching and retrieving information commonly including of commonly creating of the bibliographic records are some of the advantages that the library network facilitates. The activities that need to be performed by an individual library can be updated and performed in cooperation minimizing the work load and maximizing the services of the libraries. Besides, in a networking environment, sharing of expertise from one member library to other member library(ies) will be a reality in practice and all individual

member libraries can devote in extending advance library services along with the conventional ones.

With the use of Information and Communication Technology devices in performing library jobs, the standard of library works and services are very systematically upgraded resulting comparatively more satisfaction for those engaged in professional activities and availing the library services. The library networks is the direct result of the use of computers and telecommunications in the libraries. In different aspects of a library like resource collection development, preparation of catalogues, extending current awareness and Selective documentation services, information retrieval process and all other such works are being done with the help of these new and modern devices. A library is now is not restricted to a particular location within four walls but it is decentralized in different locations and users needs are met at his/ her door.

The North East India is consisted of eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Number of universities are there in the states and they are to work and extend services in group. In many cases, these university libraries have the common issues to ponder over of which resource limitation is one major barrier. In the case of collection, being all the libraries are from North East India, there are many common titles and the uncommon may be in need of other libraries of the region. The situation demands a common platform facilitating for discussion of the issues for workable solutions, resource can be shared among the libraries, a plan for cooperative acquisition and subsequently making them available for the users of other libraries. In that context, preparation of Union catalogue of library holdings with location mark will enhance in extending library services to certain height.

A memorandum of understanding of the participating libraries with common minimum programme for the library network will be required to be drafted and approved by the member libraries.

Considering all the relevant issues, it was conceived for establishing a library network in the university libraries of the North East India. The area is of diverse culture, socio economic diversity is very common, uneven geographical location with hills, plains, practice of various languages, etc are some of the peculiarities that the region is having. Accordingly, such diversities are reflected in different ways in the university library systems

of the region: their collection, library users, improper and insufficient ICT infrastructure, complicacy in overcoming geographic barriers, especially the transport and communication, and other such issues. It was hoped that by establishing such a network in the form of North East India University Library Network, a number of the barriers identified and likely to occur could be overcome.

With the hope of establishing such a network (the NEIULIBNET), the author approached the University Grants Commission for extending financial support in the form of Major Research Project so that a ground level study can be conducted on the pros and cons of the proposed network. It is a remarkable steps the UGC has taken by accepting the proposal for approving and extending financial support to proposal; rather it is an achievement from the side of the project proposer that he is successful in convincing the authority for such an ambitious project.

A three year duration University Grants Commission- Major Research Project on Model of establishing the "North East India University Library Network (NEIULIBNET)" is accepted by the UGC and necessary grants were made to make the study. During these years, extensive study with regards to literature search, existing library networking sites visits, library visits in India and also abroad have been conducted. Moreover, experimentation is done in developing Union catalogue, first by migrating the bibliographic records of select university libraries created in different integrated library management software to Koha platform, which is a Open Source Software; and then for a common interface by using VuFind, the other Open Source Software for the purpose. During the work done, LIS professionals having expertise in different areas extended necessary technical help and guidance for the success of the work.

It is expected that the present work will be a path finder for the present and future generations especially for the LIS professionals for developing and furthering the library network both at geographical and at the institutional levels. The beginning of the library network in the North East India University Libraries has been initiated with the present project and individuals and organizations including the university libraries of the region and also the Library Schools will take proactive role for the development of such a network benefiting the society at large and academic community of higher learning in particular.

2. The work

The project work has been done after extensive literature search, spot verification, exiting library networks in continuation both inside India and abroad (UK, USA and Bangladesh), collecting data through a prescribed questionnaire and visiting mainly university libraries and networking sites. Bibliographic Records of five university libraries namely Gauhati University, Rajib Gandhi University, Assam University, Tezpur university and KK Handique State Open University created in different platform (Libsys, Koha and SOUL) have been collected and converted to Koha environment. Records thus converted have been merged onto Viufind open source software enabling to search the result in common with location mark, irrespective of their availability. The work has been grouped into following chapters and sub chapters.

Preliminaries

Acknowledgement, Preface, Abstract, List of Tables and Figures

Chapter 1: Introduction

Introduction, The North East India, Library Automation, Statement of the Problem , Area of the study, Objectives, NEIULIBNET, Methodology, Detail work done on the Project, Field works and Library Visited, Expert Meet, Collaboration

Chapter 2: University Education in North East India

Introduction, Genesis of Higher Education in North East India, Status of Higher Education in North East India, Educational Development Agencies in North East India, Universities of North East India, Universities of North East India: Established years,

Universities of North East India: Funding pattern, Universities of North East India: Disciplines covered, Colleges under affiliation , Conclusion

Chapter 3: Library Network and the North East India

Library Network, Objectives of Library Network, Purposes of Library Network,

Library Network in India, History of Library Network in India, Library and Information Network in India: brief overview, Library Network

in North East India, North East India University Library Network (NEIULIBNET), Services to be extended, Summing up

Chapter 4: Prospects of Networking in University Libraries of North East India: Survey based

Introduction, Services and benefits, The University Libraries of North East India: based of Survey, The University Libraries under study, University Library Resources, University Library Users, University Library Staff, University Library: Sources of fund,

University Library Services, University Library Automation, Software used, Areas of Automation , Digital Library Software, Content Management Software, Hardware used, Server used, Additional Hardware Devices, Barcode/ RFID, Consortia based library system, Willing to join to the proposed NEIULIBNET, Conclusion

Chapter 5*:* Union Catalogue for the NEIULIBNET: a proposed model

Introduction, Physical or centralized vs. virtual or decentralized union catalogue,

The model union catalogue for NEIULIBNET, Applications for designing the Union Catalogue, The Prototype, Migration of bibliographic data from different Integrated Library System (ILS) packages to Koha, Marc Edit Steps, Import of MARC Records (Bibliographic data) in Different Instances of Koha, Enable OAI/PMH and ILS-DI protocol in Koha instances, The VuFind, VuFind steps, Summary

Chapter 6: Conclusion: Summary, Recommendations and Conclusion

Summary, Recommendations, Conclusion

added with References and Appendices

3. Abstract

***Purpose*:** Libraries today are not functioning in isolation; rather they are working in group with certain program resulting cooperation between themselves who are in the group. With the use of Information and Technology Devices in performing library works and service, the library network has become a common phenomenon in to-days context. Sharing of resources among member libraries, cooperative acquisition, searching and retrieving information commonly including of the bibliographic

records are some of the advantages that the library network facilitates. The activities that need to be performed by an individual library can be updated and performed in cooperation minimizing the work load and maximizing the services of the libraries.

Besides, in a networking environment, sharing of expertise from one member library to other member library(ies) will be a reality in practice and all individual member libraries can devote in extending advance library services along with the conventional ones.

The North East India is consisted of eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Number of universities is there in the states and they are to work and extend services in group. Considering the various issues, in preparing the university libraries of NE India to meet the challenges they faced, the networking among these libraries will give a proper footing in sufficiently extending the services to the user group. In the form of North East Indi University Library Network (NEIUIBNET), the library network is to be with all the university libraries of the region as its members.

Design/ Methodology: Extensive literature search has been made on different issues like North East India, its education system with reference to higher education, the use of ICT devices performing library jobs, library networking in existence in different level and also the specific library network in the form of NEIULIBNET. A prescribe questionnaire was prepared for collecting data from different universities of North East India and analyzed which help in preparing for establishing the NEIULIBNET. Visits were made to different university libraries of the region to know the present situation of the university libraries. Institutions hosting library network are also visited. During the time, Principal Investigator visited some university libraries and public libraries in USA and UK and also the Dhaka University, Bangladesh.

Guidance and suggestion from the experts from the LIS field are also taken into consideration in order to bring out a workable and affordable library network for the university libraries of North East India. An expert meet was also held which gave proper and necessary guidance for the NEIULIBNET and its implementation.

The existing bibliographic databases are prepared using different ILMS packages mainly SOUL, Koha, LibSys by the university libraries of North East India. These records are merged into one ILMS package

in Koha and a union catalogue is developed. The retrieving of the records of the said union catalogue is facilitated by using VuFind software which has number of advantages for retrieving records with necessary interface.

Findings: The higher education system in NE India is discussed with reference to its growth and development. While developing a library network, existing situation of the libraries in question is to be considered. Data have been collected through the specific questionnaire, visiting the libraries, discussing with LIS experts. The present situations of universities of North East India with reference to related issues have been reflected in the work. While developing library network, library automation of the member libraries is must and the present automation situation of the libraries is discussed in the work which is very much conducive to go for library network. Availability of hardware both server and client and also additional items, proper networking environment, required skill of professionals and attitude of stack holders towards library networking are found to be positive and encouraging. Bibliographic records of libraries under study have been collected and merged in one platform Koha and experiment has been done to develop union catalogue.

Research limitation/ Implication: There are total 67 universities in North East India in different categories-central government undertaking, state government, and private and also Institution of National Importance, etc. A minimum of one university with central government from each seven states and two from Assam (Total 9) and another four under state Government are included in the study and discussion have been made accordingly. For proposing a library network in universities of North East India, thirteen. universities are undertaken. Five universities are taken into consideration and from each university 10,000 bibliographic records are collected for developing union catalogue in the first phase and merged in Koha as discussed.

Originality/ Value: Due to various limitations it became very difficult to perform library jobs: both working and services in isolation. Resource sharing as well as library networking is a solution where number of libraries works together for optimum utilization of available resources and also meeting user's needs sufficiently. The NEIULIBNET, once it comes into will certainly be able to extend its services in proper perspective not only confined to the region but also beyond the region. This will enable

resource sharing, searching of records in one's own place, cooperative acquisition, expert mobilization and also many other ways. This network will benefit the member libraries in properly meeting varied needs of users

Keywords: SOUL, Koha, LibSys, OSS, North East India, University Libraries, NEIULIBNET, NEILIBNET, Library Automation, NEIULIBNET-Union Catalogue

Research Type: Descriptive, Evaluative, Survey Based

4. Recommendations

Individual library should enter the bibliographic data in to the computer using the particular package seriously in conformity with MARC format. Proper editing is suggested before the records finally uploaded into respective OPAC/ WebOPAC. The library should adhere fully the MARC format; proper understanding is suggested for a particular field, if it deems fit to be included / excluded in the record format among the participating libraries.

A Memorandum of Understanding (MoU) to be drafted covering all necessary preconditions both at individual and group levels which needs to be accepted by participating libraries.

The proposed NEIULIBNET is to identify certain agencies for one time grant and regular grants for establishment and continuity of the NEIULIBNET. However, the member libraries should also contribute sufficiently to this effect as fully from outside source(s) may not be possible for the expected results.

A creative and conducive environment is always necessary for implementing of any plan. The proposed NEIULIBNET will be required a proper infrastructural facility with conducive environment. The individual library should come forward in this effect.

A committee may form in the form of both advisory and executive in nature consisting of university librarians and one member from each university for initiating and continuation of proposed network.

The committee should seat at least twice a year to evaluate and also to develop the existing activities of the network that is being established.

A chairman should be identified among the participating libraries preferably a Vice-chancellor or in the same rank to guide the activities of the network and also the committee.

The chairman should be on location basis among the participating libraries.

The said committee should also work in a broader are so that in near future North East India Library Network (NEILIBNET) can be developed.

Subscription of e-resources:

The members of the network will device norms like need of titles, process of sharing the cost, avoidance of copyrights, and other related issues for e-resource subscription to be taken up by a committee constituted for the purpose among member libraries.

Governing Body: Vice Chancellor, University Librarian and the Finance Officer of the all the university. One Vice Chancellor and one University Librarians on rotation basis will act as Chairman and Member Secretary for a term preferable for two years. Terms and conditions of the functioning of the committee will be laid down in the form of MoU.

The issues to be taken up by the committee are on Managerial one, Technical issue, subscription process and other related issues. Any issue may occur during its implementation and to be taken up by the committee.

One library responded that Inadequate ICT Infrastructure is the main hurdle in implementation of the automation project while four disagreed and other 7 did not give any comment on the existing infrastructural facilities; Insufficient budget provision is another hurdle expressed especially by the university libraries under state government;

It is one of the major findings that the library staff in most cases cannot handle the ICT devices. Most cases libraries are facing complexities because of lack of expertise in implementing the automation project. Regular intensive in- service training is a solution, it is suggested. This has resulted the installation and customization of the automation project at the initial stage through outsourcing. However, once it is in ongoing situation, library staff able to handle properly afterwards.

Indifferent attitude towards any new proposal from the management is also noticed. Management needs to be oriented on the very purpose of the project and the benefits to avail.

The experiences gathered by visiting the libraries as mentioned will be utilized in giving the shape for the NEIULIBNET.

5. Conclusion

The North East India University Library Network (NEIULIBNET) is conceived for bringing out a common platform for the library and information centers especially for the university library system in North East

India. This platform is to be used with certain goals which will be common in nature and use. The union catalogue with common interface for the participating libraries irrespective of their specific Integrated Library Management Software is a milestone in that direction. Collection development in common, expert mobilization for the benefits of individual library, a platform for discuss and deliberate on the common issues of interest, searching commonly for solutions on the problems are some of the issues that the NEIULIBNET can be worked upon.

The advantageous factors that a library network are having, each of them can be a part of the NEIULIBET with the sole intention that library and information center is to work in pro active manner for giving benefits to the society in general and academic community in particular. The facilities available in and around us with regard to ICT use in LICs are to be availed optimum way and the library resources of each library are to be utilized properly and at ones place. The concept "library works and services" is to be within a single locations has changed drastically and because of use of ICT devices in performing library jobs and service, it is very much decentralized. The library networks has made the situation more useful and user friendly and comparatively less expenses and requiring less time for the library users to have a document in his/ her hand.

A Memorandum of Understanding (MoU) is to be drafted and approved by the participating/ member libraries with a common minimum programme for proper execution of the network. The document should clearly indicate the responsibilities of the participating libraries enabling to establish the network and to continue it for the time to come. The financial requirements, skills and expertise of the LIS staff, proper environment, and accessibility by the stack holders are some of the factors directly relate to the success of the network. With the establishment of the NEULIBNET, an expectation for a long time to bring the university libraries of the region with easy reach of the academic community will be fulfilled.

Reference

https://www.gauhati.ac.in/arts/library-and-information-science

ANEXURE I

Head of the Departments

Name of the Head	From	To
Dr. Jogeswar Sarma (i/c)	1966	31-10-1983
Ms. Alaka Buragohain	01-11-1983	31-10-1986
Mr. Bhadra Borah	01-11-1986	31-10-1989
Dr. Narendra Nath Sharma	01-11-1989	31-10-1992
Ms. Alaka Buragohain	01-11-1992	31-10-1995
Dr. Narendra Lahkar	01-11-1995	30-11-1997
Prof. Narendra Nath Sharma	01-12-1997	31-08-2001
Prof. Narendra Lahkar	01-09-2001	23-10-2009
Prof. Rajani Kanta Barman	24-10-2009	23-10-2012
Prof. Narendra Lahkar	24-10-2012	08-11-2015
Prof. Rajani Kanta Barman	09-11-2015	08-02-2016
Prof. Sanjay Kumar Singh	09-02-2016	Till Date

ANEXURE II

Ph.D. Awardees

Name of the Scholar	Topic	Name of the Guide
A Takatemsu Imchen	A Study of Public Library System as Community Information Centers in Nagaland : Realities and Challenges	Narendra Nath Sharma
Abdul Jalil	Perception and Satisfaction Level of Open Access Journals in the University Libraries of Assam: A Study	Sanjay Kumar Singh
Alaka Buragohain	A Study of the Socio Cultural Aspects of Library Support for Non Financial Learning in Assam	Independent
Alok Kumar Pathak	Impact of Information Technology on the Collection Development in University Libraries of Assam : A Study	Narendra Lahkar
Amal Kumar Mondal	Citation Pattern of Doctoral Dissertations in Physics Submitted to the Gauhati University, Guwahati 1993-2000 : A Bibliometric Study	Rajani Kanta Barman
Anamika Baishya	Problems and Prospects of Library Networking in Public Library System in Assam: A Study	Narendra Lahkar
Anu Hazarika	A Study on Organization and Services of Libraries in Research and Training Programme in Financial Institutions of North East India	Narendra Lahkar
Anuradha Singha	Transition from Traditional to Web-based Reference Service in University Libraries of North East India: A Prospective Study	Narendra Nath Sharma
Apurba Jyoti Majumder	Use of Web Based Resources in Engineering College Libraries of Assam : An Empirical Study	Narendra Lahkar
Badan Barman	Web Resources in Library and Information Science: A Managerial Approach	Narendra Lahkar
Barsha Rani Duarah	Job Analysis of Library Professionals in Science and Technology Institutes of Assam : An Evaluative Study	Narendra Nath Sharma
Bhrigu Ram Bharali	Role of Special Libraries in Assam and its Socio Economic Impact on Societies : A Study	Narendra Nath Sharma
Bhupendra Nath Sarma	Collection Development in the Libraries of Technical Institutions in Assam : A Study in the Context of Emerging ICT	Rajani Kanta Barman
Bibhuti Choudhury	Information Needs and Information Seeking Behavior of Users in Major Science and Technology Libraries of North East Region With Special Reference to Assam	Rajani Kanta Barman
Bijoya Ray	Use of Library Software Packages in the Libraries of Institutes of Higher Learning in Assam with Reference to Serial Control Module: An Evaluative Study	Sanjay Kumar Singh
Bikika Laloo	Retrieving Information on the Socioeconomic and Sociocultural Conditions of North East India using Different Internet Search Engines	Narendra Lahkar
Bina Medhi Lahkar	Earth Science Periodicals Collections in the Three Universities of Assam: Their Impact on Research Activities during 1988-98: A Critical Study	Alaka Buragohain

Birender Pal	Impact of INFLIBNET in the Modernization of University Libraries in India with Special Reference to North Eastern Region	Rajani Kanta Barman
Dalimi Devi	Library Services in Medical and Paramedical Colleges in Assam : Analytical Study	Narendra Nath Sharma
Deepa Baruah	The Factors of Competency Development Among the Working Library Professionals of the University Libraries of North East India: Challenges and Realities	Narendra Nath Sharma
Dhrubajit Das	Document Description and their Practices in University Libraries in North East India : A Study	Narendra Lahkar
Dipen Deka	Digital Resources Management with Reference to Indian University Libraries	Narendra Lahkar
Gautam Kumar Sarma	Prospects of Using Open Source Library Management Software in College and University Libraries of Assam	Narendra Lahkar
Gojendra Ballabh Dev Choudhury	Information Support to Social Scientist in Social Science Libraries in Assam	Rajani Kanta Barman
Gouri Sankar Karmakar	Use of Online Resources Among Research Scholars in Social Sciences in University Libraries of Assam : A Study	Narendra Lahkar
Hari Charan Das	Reflection of Rural Information in Leading Newspapers of Assam: A Critical Study	Narendra Nath Sharma
Hemanta Kumar Barman	Feasibility of Library Software Packages for Library Automation in Higher Educational Institutions of Assam : A Critical Study	Alaka Buragohain
Jnyandeep Saikia	Impact of User Education on Academic Libraries in Assam : A Study on Strategic Management of Resources and Services	Rajani Kanta Barman
Jyotika Devi	Use of Online Reference Sources in Engineering College Libraries of Assam: A Study	Narendra Lahkar
Jyotirekha Bhattacharyya	Digital Archiving of Newspapers and their Content Dissemination in Media Archival in India with Special Reference to Assam	Sanjay Kumar Singh
Kankana Baishya	Management of Indian Institutional Repositories : An Evaluative Study	Sanjay Kumar Singh
Kishor Sarma	Convergence of Information Technology in Special Libraries of Assam: Its Challenges with References to Organizational Management	Sanjay Kumar Singh
Kishore Kalita	Challenges and Realities of Children Libraries of Assam : An Analytical Study	Narendra Nath Sharma
Kishore Kumar Sarmah	Prospects of Library Marketing in North East India: A Study	Narendra Lahkar
Kukila Goswami	Motivating LIS Professionals in Engineering College and Institute Libraries of Assam for Qualitative Development	Rajani Kanta Barman
Mahtab Hussain	Public Libraries in a Multicultural Society and their Role in Promoting Social Harmony : A Critical Study with Special Reference to Assam	Narendra Nath Sharma
Mitali Goswami	Preservation of Library Documents in Digital Environment with Reference to College Libraries of Assam: An Empirical Study	Narendra Lahkar

Morgan D Syiem	A Study of the Trend of Growth of Agricultural Literature in North Eastern Region from 1976 to 1996 and its Impact upon Higher Studies in Agricultural Science	Alaka Buragohain
Motebennur Maltesh Ningaya	Buddhist Manuscripts with Special Reference to Arunachal Pradesh: Utilization, Restoration and Digitization	Narendra Lahkar
Mukut Sarma	Prospects of Application of Information Technology in Academic Libraries in Assam: A Study	Alaka Buragohain
Nabajyoti Das	Deviance in Academic Libraries: A Sociological Study with Reference to Assam	Narendra Nath Sharma
Nabin Chandra Dey	Prospects of Consortia based Resource Sharing among the Agricultural University of North East India with special reference to Central Agricultural University Imphal	Sanjay Kumar Singh
Narendra Lahkar	Prospects of Automated Cataloguing in the Three University Libraries of Assam: Based on Users' Statistic Under Major Catalogue Code	Alaka Buragohain
Nikhil Hazarika	Job Satisfaction of University Library Professionals in Assam: A Critical Analysis	Rajani Kanta Barman
Niraj Barua	Prospects of Human Resource Development in the Libraries of Institutions of Higher Education in North East India with Special Reference to Library Automation : A Critical Study	Rajani Kanta Barman
Nirmal Ranjan Mazumdar	Management of Manuscript Collection in Assam in Digital era : A Practical Approach using ICT tools	Sanjay Kumar Singh
Pallavi Gogoi	Documentation of Information Resources in Womens Studies Centres of India with Reference to North East India	Narendra Nath Sharma
Pranab Kumar Barooah	A Model System for Evaluation of the Resources of a Special Library on the Basis of User Satisfaction Using Bibliometric Techniques: A Case Study at Regional Research Laboratory	Narendra Nath Sharma
Prasanta Kumar Deka	Prospects of Coordinating Sarba Siksha Abhijan and Rural Libraries for Social Development in Assam with Special Reference to Kamrup District	Narendra Nath Sharma
Rajib Kumar Das	The Effectiveness of Continuing Education Programme vis a vis in-service Training for LIS Professionals: A Study of University Libraries of North East India	Narendra Nath Sharma
Ranjanjyoti Sarmah	The Role of Library Professionals for Effective Use of Library Resources in the present context : A Study with Reference to the University Libraries of Assam	Narendra Nath Sharma
Ranjit Kumar Rajbangshi	Strategic Capacity Planning for Hybrid Library Environment	Sanjay Kumar Singh
Ranvir Singh Yadav	Impact of Academic Libraries in Development of Human Resources: with Special Reference to Arunachal Pradesh and Nagaland (Colleges and Universities) 1971 to1999	Alaka Buragohain
Rumi Das	Management of E-Resources in the Health Science Libraries of Assam: An Analytical Study	Sanjay Kumar Singh
S Kannan	Public Library System in Bhutan : A Systematic Approach for Future Developments	Narendra Lahkar
Sadananda Nath	College Library Effectiveness Study with Special Reference to the Tinsukia and Dibrugarh District	Narendra Nath Sharma
Sanatan Deka	The Working and Functioning of the Assam Legislative Assembly Library and its Use and Impact on Legislators and Administators : A Critical Study	Narendra Nath Sharma

Sanjay Kumar Singh	A Study of Impact of Information Technology on the Effective Management of Library Operations with Special Reference to Assam	Alaka Buragohain
Sanjib Kumar Deka	Search Engines and their Search Performance in Retrieving Internet Resources : An Evaluative Study	Narendra Lahkar
Sanjoy Kumar Barman	Audio Visual Materials and their Management and Preservation in Television Media Organizations : A Case Study of the Library of Guwahati Doordarshan Kendra	Alaka Buragohain
Sarita Bhattacharjee	Information Seeking Behaviour of Degree Students of General Colleges of Barak Valley	Narendra Nath Sharma
Sashilemla Ao	A Study on Growth and Development of Literature in Naga Languages	Narendra Lahkar
Sharmila Bose	Evaluation of University Library Websites of West Bengal : A Study from Librarians Perspectives	Narendra Lahkar
Smiriti Rekha Baruah	A Critical Study of the Growth of Tea Literature with Special Reference to India from 1970-2002	Alaka Buragohain
Sumana Chakrabarty	Use of Internet Service in the University Libraries of Assam : An Evaluative Study	Alaka Buragohain
Tarini Dev Goswami	Growth of Research Output in Science and Technology Institutes in Assam and the Role of Libraries	Narendra Lahkar
Tilak Hazarika	Documentation Works and Services of Forestry Literature of Indian Council of Forestry Research and Education (ICFRE): A Study	Narendra Lahkar
Tonmay Sabhapandit	Growth and Development of University Libraries of Assam in the Context of Ranganathan's Fifth Law of Library Science in IT Environment Since 1995	Rajani Kanta Barman
Utpal Das	A Critical Study of Preservation Techniques for Sanchi Manuscripts of Assam	Alaka Buragohain
Utpal Sarma	Information Needs and Information Seeking Behaviour of Urban Community and its Satisfaction by the Public Library System	Alaka Buragohain
Vijay Raghav Tiwari	Role of Public Libraries in the Development of Adults Education of Arunachal Pradesh: With Special View on Papumpare District: An Analytical Approach	Narendra Nath Sharma
Vijoy Kumar Anand	Designing of an E Learning Model for Supplementing LIS Education Programmes	Rajani Kanta Barman
Wakidur Rahman	Historical Development of Legal Literature on Customary Laws of Assam: A Critical Study	Alaka Buragohain and A. Hussain
Zabeen Ahmed	LIS Education in the Universities of India : A study on the Course Contents with Reference to Universities of NE India	Narendra Lahkar

ANEXURE III

M.Phil. Awardees

Name of the Scholar	Topic	Name of the Guide
Jaba Moni Das	Resource Support of Krishna Kanta Handiqui Library, Gauhati University (KKHL, GU) Towards Doctoral Studies in Political Science, Economics and Education: A Citation Analysis	Tilak Hazarika
Jyotisikha Das	Coverage of Social Science Thesis in Shodhganga: Gauhati University and Dibrugarh University	Sanjay Kumar Singh
Kakali Sarmah	Assessment of Service Quality in College Libraries of Guwahati Using Libqual Parameter	Tilak Hazarika
Latifur Alom Ahmed	Public Library Services in Dhubri District	Rajani Kanta Barman
Mitali Barman	Re-engineering the College Libraries of Kamrup District of Assam: A Plan	Narendra Lahkar
Mitali Das	Collection Development and its Impact on User in the College Libraries of Kamrup District	Badan Barman
Rajdeep Das	Cost Benefit Analysis of Library Collection in College Libraries of Guwahati	Dipen Deka
Rajib Kalita	Technical Processing in the Private University Libraries of Assam: A Study	Rajani Kanta Barman
Rudrani Choudhury	Evaluation of ICT Skills of the Library Professionals in the Engineering College Libraries of Assam: A Study	Dipen Deka
Shaikhong Basumatary	Administrative Module with Reference to Koha and SOUL	Sanjay Kumar Singh

ANEXURE IV

UGC NET Qualified

Name of the Student	**UGC NET Examination**
Ranjit Kumar Rajbangshi	1995 June
Mukut Sarma	1997 December
Sanjay Kumar Singh	1997 December
Kishor Sarma	
Tilak Hazarika	1998 June
Sumana Chakrabarty	
Anujay Saikia	
Mitali Goswami	
Bhabanda Das	
Kishore Sarma	
Rumi Das	2004 December
Dipen Deka	2005 June
Juri Thakuria	2005 June
Badan Barman	2005 December
Purabi Sonowal	2005 December
Apurba Jyoti Mazumder	2006 June
Badan Barman	2006 June
Nikhil Hazarika	2006 June
Sashilemla Ao	2006 June
Apurba Jyoti Mazumder	2006 December
Geetali Das	2006 December
Gauri Sankar Karmakar	2006 December
Opurba Doimari	2006 December
Momi Bardoloi	2007 June
Sangrang Brahma	2007 June
Sangita Roy	2007 June

Sangrang Bramha	2007 December
Bhagabati Narzary	2008 June
Anamika Baishya	2010 June
Kankana Baishya	2010 June
Hemanta Gogoi	2012 June
Dhiru Barman	2012 June
Priyanka Chettri	2012 June
Rajashree Borkakati	2012 June
Gagan Ch. Talukdar	2012 June
Barsha Rani Duarah	2012 June
Kakali Gogoi	2012 June
Anjan Gohain	2012 June
Dipak Sarma	2012 June
Rimi Brahma	2012 June
Himadri Devi	2012 June
Babli Brahma	2012 December
Birender Pal	2012 December
Jaba Moni Das	2012 December
Nirmal Ranjan Mazumder	2012 December
Papori Haloi	2012 December
Nitupan Sarmah	2012 December
Deepamoni Das	2012 December
Jitu Mani Das	2012 December
Pallavi Doley	2012 December
Rajib Kr. Das	2012 December
Anuradha Singha	2012 December
Unindajyoti Choudhury	2012
Merina Ahmed	2012 December
Sankar Sarkar	2012 December
Anupama Chetia	2013 June
Pradip Kr. Singha	2013 June
Y. Haripriya Devi	2013 June
Dipankar Borah	2013 June

Jyotirekha Bhattacharyya	2013 June
Debajit Borgohain	2013 December
Rosy Chakraborty	2013 December
Pankaj Brahma	2013 December
Manisha Kakati	2013 December
Puspanjali Deka	2014 June
Dipika Saharia	2014 June
Dersing Daimary	2014 June
Bhanushree Deka	2014 June
Seema Devi	2014 June
Mondita Borah	2014 December
Jyotirmay Sarkar	2014 December
Jitu Boro	2014 December
Bhanushree Deka	2014 December
Y. Haripriya Devi	2014 December
Deepjyoti Kalita	2014 December
Dinamani Talukdar	2014 December
Hira Kalita	2014 December
Tinku Pegu	2014 December
Kumar Machahary	2014 December
Binita Kalita	2015
Deepjyoti Kalita	2015 June
Kakali Sarmah	2015 June
Mitali Barman	2015 June
Rima Nath	2015 June
Bhaskar Saikia	2015 December
Krishna Kishore Das	2015 June
Phool Rani Das	2015 December
Saroj Kr. Mandal	2015 June
Snigdha Basumatary	2015 December
Jaba Moni Das	2016 July
Prerna Shah	2015 December
Pallabi Devi	2015 December

Rituraj Borkakoti	2016 July
Rubi Baishya	2016 July
Shaikhong Basumatary	2016 July
Phool Rani Das	2016 July
Rima Nath	2016 July
Tarali Barman	2016 July
Saurav Jyoti Lashkar	2016 December
Digbijay Das	2017 January
Gaurav Khatiya Deori	2017 January
Jaba Moni Das	2017 January
Mitali Das	2017 January
Rajdeep Das	2017 January
Sanjib Deka	2017 January
Banani Das	2017 November
Hatneihoi Changsan	2017 November
Kumar Machahary	2017 November
Manab Pratim Sarma	2017 November
Ridip Lahkar	2017 November
Sangita Goyari	2017 November
Ankita Saloi	2018 July
Banasri Deka	2018 July
Dipankar Das	2018 July
Kangkana Goswami	2018 July
Manashjyoti Deka	2018 July
Nilakshi Sharma	2018 July
Tribeni Pathak	2018 July
Ranjan Borah	2018 December
Manashjyoti Deka	2018 December
Sangita Goyari	2018 December
Silpisikha Devi	2018 December
Pritishmita Thakuria	2018 December
Dhruba Jyoti Borgohain	2018 December

ANEXURE V

JRF Awardees

Type of Fellowship	**Name of the Student**	**Date of Award**
ICSSR Fellowship	Badan Barman	4th October, 2007
IGCAR JRF	Deepjyoti Kalita	Adv. No. 01/2015
UGC JRF	Dipen Deka	26th June, 2005
UGC JRF	Apurba Jyoti Mazumdar	2006 December
UGC JRF	Sangrang Bramha	2007 December
UGC JRF	Bhanushree Deka	29th June, 2014
UGC JRF	Bhanushree Deka	28th December, 2014
UGC JRF	Yendrembam Haripriya Devi	28th December, 2014
UGC JRF	Dhiru Barman	28th June, 2015
UGC JRF	Krishna Kishore Das	27th December, 2015
UGC JRF	Pallabi Devi	27th December, 2015
UGC JRF	Rituraj Borkakoti	10th July, 2016
UGC JRF	Deepjyoti Kalita	22nd January, 2017
UGC JRF	Hatneihoi Changsan	5th November, 2017
UGC JRF	Kumar Machahary	5th November, 2017
UGC JRF	Jaba Moni Das	8th July, 2018

ANEXURE VI

Events Organized

Dates	**Title of the Event**
1984	UGC National Lecture Series and Regional Seminar
1986	1st UGC Refresher Course in Library and Information Science
1992	Silver Jubilee Celebration of the Department of Library and Information Science, Gauhati University
15-2-1999 to 26-2-1999	NISSAT / IIS Advanced Course on CDS / ISIS & WINISIS
02-02-2000	A State Level Seminar on "Changing Trends of Librarianship with Special Reference to N. E. India"
2001	Four Day INFLIBNET Training Programme on Library Automation
1-12-2001 to 21-12-2001	2nd UGC Refresher Course in Library and Information Science
2003	3rd UGC Refresher Course in Library and Information Science
2005	4th UGC Refresher Course in Library and Information Science
27-3-2007 to 28-3-2007	National Seminar on Problems and Prospects of Rural Libraries with Reference to NE India
2-11-2007	Sensitization cum Awareness Programme for Technology Information Facilitation Programme
7-12-2007 to 8-12-2007	5th Convention of Promotion of Library Automation and Networking in North Eastern Region (PLANNER-2007)
7-5-2008 to 8-5-2008	National Workshop on Trends in Library and information Science Research
9-1-2009 to 10-1-2009	National Seminar on Digitization and Networking of Library and Information Centres in North East India
12-8-2009	Librarians Day, Convention of ALA and Symposium on Role of Library Associations in Development of Libraries
11-11-2011 to 12-11-2011	National Seminar on Modernization of Public Libraries in India with special reference to North East India (NASEMPLINER)
5-7-2013 to 9-7-2013	Koha Workshop
3-10-2013 to 5-10-2013	National Seminar on North East India Library Network: Challenges and Opportunities
25-11-2014 to 28-11-2014	26th Convention of Indian Association of Special Libraries and Information Centres (IASLIC): Roadmap to Usher in Knowledge Society

17-3-2016 to 18-3-2016	National Workshop on Prospects of Consortia in North East India
27-9-2016 to 29-9-2016	National Workshop cum Training Program on DSpace
27-3-2017 to 28-3-2017	National Seminar on Comparative Librarianship
27-3-2017 to 28-3-2017	Golden Jubilee Lecture on "The Dilemma of Library Collection in the Electronic Age: Designing our Future by Taking Small Steps Today"
8-7-2017 to 10-7-2017	1st International Conference on Transforming Libraries
4-12-2017 to 8-12-2017	Capacity Building Programme of National Mission on Libraries for Public Library Personnel

ANNEXURE VII

Publications

Title	Sub-Title	Author / Editor / Compiler	Year	Pages	Price	ISBN/ISSN
Librarianship in North-East India	A Souvenir to Commemorate the Silver Jubilee Celebration, Department of Library and Information Science, Gauhati University, July 4-5, 1992	Editor: Bhadra Borah. Assistant Editor: Bhupen Goswamee	1992	146	N.A.	N.A.
Journal of Library and Information Science, Gauhati University	Volume 1, August, 2004	Editor: Dr. Narendra Lahkar	2004	110	100	N.A.
Souvenir	5th Convention of Promotion of Library Automation and Networking in North Eastern Region (PLANNER-2007) held in Guwahati during December 7-8, 2007. Jointly Organized by Information and Library Network Centre, Ahmedabad and Department of Library and Information Science, Gauhati University.	Editor: Dr. Utpal Sarma	2007	51	100	N.A.
Digitization and Networking of Library and Information Centres in North East India	Proceedings of the National Seminar on Digitization and Networking in Library and Information Centres in North East India held in Guwahati during January 9-10, 2009. Organised by the Department of Library and Information Science, Gauhati University and Central Reference Library, Kolkata.	Editor: Dr. Narendra Lahkar. Assistant Editor: Dr. Sanjay Kumar Singh	2009	490	500	978-81-908708-0-1
Journal of Department of Library and Information Science, Gauhati University	Dr. Jogeswar Sarmah Festschriff Volume, Vol. 2, No. 1, August 2011	Editor: Prof. Rajani Kanta Barman	2011	179	150	2249-0124
NASEMPLINER-2011	Proceedings of the National Seminar on Modernization of Public Libraries in India with Special Reference to North East India held in Guwahati during November 11-12, 2011. Organised by the Department of Library and Information Science, Gauhati University in Collaboration with Central Reference Library, Kolkata.	Editor: Prof. Rajani Kanta Barman	2012	388	N.A.	978-81-908708-0-2 (Actual: 978-81-908708-1-8)
North East India Library Network: Challenges and Opportunities	Proceedings of the National Seminar on North East India Library Network: Challenges and Opportunities held in Guwahati during October 3-5, 2013. Organised by the Department of Library and Information Science, Gauhati University and Central Reference Library, Kolkata.	Editor: Dr. Narendra Lahkar. Assistant Editor: Dr. Sanjay Kumar Singh	2014	400	400	978-81-908708-0-3 (Actual: 978-81-908708-2-5)
Reflection	Published on the Occasion of IASLIC XXVI National Seminar held in Guwahati during November 25-28, 2014. Organised by the Department of Library and Information Science, Gauhati University and Indian Association of Special Libraries and Information Centres (IASLIC), Kolkata.	Editors: Dr. Dhrubajit Das, Dr. Nabajyori Das	2014	102	500	978-81-908708-0-4 (Actual: 978-81-908708-3-2)

Prospects of Consortia for North East India Libraries	Proceedings of the National Workshop on Prospects of Consortia for North East India Libraries held in Guwahati during March 17-18, 2016. Organised by the Department of Library and Information Science, Gauhati University in Collaboration with the Indira Gandhi National Centre for the Arts (IGNCA)	Editor: Prof. Narendra Lahkar	2016	188	200	978-81-908708-0-5 (Actual: 978-81-908708-4-9)
Comparative Librarianship	Proceedings of the National Seminar on Comparative Librarianship held in Guwahati during March 27-28, 2017. Organised by the Department of Library and Information Science, Gauhati University in Collaboration with Central Reference Library, Kolkata.	Editor: Dr. Narendra Lahkar. Joint Editors: Dr. Dipen Deka, Dr. Badan Barman	2017	174	200	978-81-908708-0-6 (Actual: 978-81-908708-5-6)

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Walk down memory lane

About the book:

The book 50 years of LIS Education in North East India is published on the occasion of the Golden Jubilee year of the Department of Library and Information Science, Gauhati University. The Department of Library and Information Science, Gauhati University is the first department which was established in 1966 in the entire North East India. The focal point of the book is different dimensions of Library and Information Science education in North East India in particular and India as a whole. Contents of the book mainly deals with LIS education in North East India; LIS research in North East India; Career/Job opportunities for LIS students; Library Associations and the LIS education in India; Future of LIS curricula in Indian Universities in Global Perspectives; LIS Education for supporting social development; LIS Education for heritage preservation; Prospects of LIS Education; LIS Education in new generation; LIS and Universe of Knowledge; History of LIS Education; LIS Education through distance mode; LIS Schools in India; and Libraries are gate way to Knowledge Society. The book will be useful for all library professionals.

The Editors:

Dr. Sanjay Kumar Singh is presently Professor and Head in the Department of Library and Information Science Gauhati University, Guwahati, Assam. He is associated with the noble job of teaching since July 1997 in GU. Before associating as teacher he was also a Librarian in the Institute of Neurological Science (now GNRC), Guwahati for two years from 1995-97., He has published more than 75 research papers/articles in national and international journals and proceedings. Under his supervision nine research scholars have been awarded PhD degree from Gauhati University, Assam.

Dr. Tilak Hazarika Assistant Professor, Department of Library & Information Science, Gauhati University served Tezpur University, Tezpur, Assam as Information Scientist for 5 years (2007-2011) and Rain Forest Research Institute (Min of Env & Forests), Jorhat Assam for 9 years (1998-2006) before joining the present assignment. He has to his credit 35 publications in different journals of repute, conference proceedings and book chapters. His areas of interest are ICT application in LIS, Database Systems, Library Statistics, Operations Research, Scientometric and. At present there are six students pursuing PhD under his guidance.

Dr Dipen Deka is Assistant Professor, Department of Library and Information Science, Gauhati university, Assam.. He had served B.K.M. Government Law College (3½ years) Guwahati, Assam as Librarian prior to joining the present assignment. He has to his credit 20 publications in journals, conference proceedings and book chapters. His areas of interest are library classification, library statistics, creation and management of digital library, preservation of library resources.

Dr. Badan Barman is working as an Assistant Professor in the Department of Library and Information Science, Gauhati University since September 29, 2014 till date. Prior to this he ws Assistant Librarian of KKH State Open University, Guwahati. He was awarded Ph.D. in Library and Information Science by Gauhati University in the year 2011, for his thesis "Web Resources in Library and Information Science: A Managerial Approach" under the guideship of Professor Narendra Lahkar.

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